

MODERN BANKING

by

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TO
MY MOTHER

PREFACE

The purpose of this textbook is twofold. First, it is intended to give the student such basic, elementary information as is required for an intelligent approach to the banker-customer relationship. With this idea in mind, considerable space has been devoted in the earlier chapters of this volume to a discussion of the meaning of the bank statement, the nature of credit instruments which form the connecting link between the customer and his bank, the nature of bank deposits and the protection afforded them, and the process of clearing and collecting checks, which provide us with our most important medium of exchange. The second purpose of the book is to give the student some knowledge of contemporary banking institutions and banking practices. Such information serves not only as a sound basis for an understanding of current banking events and problems, but also as a background for more advanced study of the complex questions relating to modern central banking and monetary theory.

As far as possible, the author has avoided chronological accounts of legislative developments, but instead, has concentrated his attention upon the existing legal framework within which our present-day banking system functions. This treatment, he believes, is less confusing and of more value to the elementary student than a chronological one.

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CHAPTER I

INTRODUCTION

Banks as financial institutions. An approach to the subject of banking may be made most easily by examining the larger general field of financial institutions to which banking belongs. A financial institution may be defined as an organization through which funds in the form of money or claims to money are assembled and transferred from those individuals and firms having a surplus of economic goods (as represented by such funds) to other individuals and firms whose needs for funds exceed their existing supply.

Economic desirability of financial institutions. It is easy to understand why financial institutions have become so essential a part of modern economic life when one considers that specialization and competition have tended to place in control young and energetic individuals equipped with the necessary talents but lacking the required capital. Any means of transferring capital from the hands of its owners to the eager hands of the businessman is certain to be looked upon with favor by both the lender and the borrower. Not only are the immediate parties benefited by the existence of financial institutions, but also the welfare of economic society as a whole is promoted. If the process of assembling and redistributing capital funds is wisely carried out, the result is a more effective distribution of capital funds and capital goods than would be otherwise possible.

Types of financial institutions. The stock market, using the term in its widest sense, is one important type of financial institution. Through its operations funds of specula-

tors and investors are put into the hands of corporations whose stock is being offered for sale. It facilitates the exchange of funds intended for permanent investment for certificates of stock representing ownership.

Investment bankers, bond houses, security companies, and underwriting syndicates act as intermediaries between persons needing capital funds and the investors. By purchasing securities with funds at their command, the investment bankers are able to seek out potential investors and induce them in turn to purchase securities. Somewhat akin to the activities of investment bankers are those of the different varieties of investment trusts, which issue their obligations to investors and use the proceeds for the purchase of securities. The trust departments of banks and trust companies also perform the functions of financial middlemen. Life insurance companies, accumulating reserves through their use of straight-line premium payments and endowment policies, constitute another special form of financial institution. Bill brokers and commercial paper houses, although less in the public eye, are also important cogs in the financial machinery.

It is with those institutions commonly called banks that we are primarily concerned here. Banks might logically be divided into two classes—savings and commercial—savings banks, proper, to receive only deposits which are not subject to check, and commercial banks to accept demand deposits. In practice such a division cannot be made, since the savings and commercial banking functions are frequently, if not normally, carried on by the same bank. These two functions, however, are sufficiently different to warrant separate consideration.

Savings banks. The savings bank presumably gathers in the thrift accounts or the "rainy-day" savings of the poor and middle class, promises to return the money deposited on due notice (normally waived), and invests the funds in conservative securities, mortgage loans, or other earning assets. The depositor benefits by receiving interest on his

funds, by the security derived from the expert diversification of investments provided by the bank, and by the protection arising from the bank's capital, surplus, and undivided profits (or surplus, if it is a mutual savings bank). In case of loss on the bank's investments, the bank's capital and surplus act as a guaranty against loss for the depositor. The savings bank furnishes the small saver with a service which is not available to him through any other financial institution.

The commercial bank. In contrast to the savings bank, which holds thrift accounts and time deposits intended for more or less permanent investment, the commercial bank acquires the short-time, temporary surpluses of individuals and business houses. A person may deposit his salary check and draw on the account so established during the interval before he receives additional income. The business house, because of the failure of income to synchronize perfectly with outgo, will normally carry some surplus funds on deposit with the bank. This surplus will sometimes be great and sometimes small. At times of heavy expenditure it may disappear altogether, and the depositor will be forced to borrow.

A commercial bank with only one demand depositor would be unable to make any loans because of the uncertainty as to when the depositor would demand payment. However, a bank with a thousand depositors can rely upon the law of averages to come to its assistance. Although it is difficult, if not impossible, to predict the behavior of any one depositor, it is possible through experience to determine the probable aggregate behavior of a large number of depositors, some of whom are drawing out their funds while others are building up theirs. If allowance is made for the seasonal bias (if any) of a group of depositors, the banker can tell within reasonable limits what proportion of his total deposits will normally remain untouched by the day-to-day withdrawals and deposits of his customers. Since this is so, the banker is able to lend on short time and good

security a given proportion of his deposits without facing any shortage of funds to meet customers' demands.

It follows, therefore, that the commercial banker is able to act as an intermediary between the owners of short-time surplus funds and would-be borrowers. Without the intervention of the commercial bank, an individual would find it difficult to lend short-time surplus funds, both because of the uncertainty as to the amount that can be spared for any given time and because of the difficulty of appraising the credit standing of the borrower.

The commercial bank thus serves the depositors, the borrowers, and itself. The depositors gain by getting a free service¹ in the custodianship of their funds, plus the added service of an active checking account. In the past the more valuable demand deposits received a small interest payment, although this practice is now prohibited by law for all insured and Federal reserve member banks. The borrower gains by having available an institution capable of evaluating his needs and his prospects and willing to advance him funds. The bank itself profits by furnishing a service to both the borrower and depositor and may therefore pay dividends to its stockholders as a result of wise and successful operations.

Economic function of commercial banks. Commercial banks are of definite advantage to their depositors. They protect depositors' funds from loss and theft and furnish the means for convenient and safe transfer of funds through the use of checks. Demand deposits are quite superior to actual cash, a fact which makes them universally acceptable among persons who can afford them and which enables banks to maintain a volume of deposits several times as large as the volume of their cash reserves. The commercial bank with unused reserves is thus able to grant loans to borrowers in the form of demand deposits, which can be

¹ This is not strictly correct, since depositors failing to carry adequate balances to compensate the bank for its trouble may be compelled to pay a "service charge."

spent like cash. Thus not only do the commercial banks serve the depositors, but they also afford the borrowers a convenient and economical way of acquiring short-term capital funds.

Granting, then, that commercial banks serve both depositors and borrowers, do they actually contribute anything to the general economic welfare? Are they of any genuine economic service? The fundamental economic services of commercial banks may be divided into two main classifications. The first is the convenient and economical method of payment which they make available through their efficient system of clearing and collecting checks. Demand deposits are thus transferred from one owner to another and furnish one of the most important types of currency. The economic world is, of course, interested in the soundness of bank deposits and the effective manner in which they are interchanged. Not only is the soundness, and hence the acceptability, of demand deposits vitally important, but also their quantity holds great interest, since the quantity of effective money in the country changes mainly as does the quantity of demand deposits.

[A second service rendered by commercial banks has reference to their effect on the volume and distribution of actual capital. The volume of capital goods in an economic community is affected by the financial institutions which are available. Thus the investment banker and the savings bank may be said to promote capital accumulation by providing a convenient channel through which savings may be intelligently and profitably invested. Likewise the commercial banks affect the volume of capital accumulations.] They differ from savings and investment banks, however, in that the latter are instruments for the accumulation of voluntary savings, while the commercial banks promote forced or involuntary saving

If we view the commercial banking system as a whole, we find not only that loans are dependent upon the volume of deposits, as in the case of individual banks, but that de-

posits in the main are the result of loans. From the standpoint of all the banks, new additional loans merely result in new demand deposits, first in the hands of the borrowers and later in the hands of those from whom the borrowers have purchased goods and services. [The borrowers who are making new loans at commercial banks, at the time when such loans and deposits are increasing, are in need of capital. At whose expense, we may ask, is this capital obtained? The banks have put new purchasing power (demand deposits) into the borrowers' hands. The borrowers are thereby enabled to bid up the price of goods. To the extent that consumers must restrict consumption because of the higher prices, the expansion of loans and deposits results in capital accumulation.² We may say, therefore, that the volume of capital goods represented by the bulk of commercial bank loans has resulted from the forced saving process, which has both advantages and disadvantages.] [The main advantage lies in the fact that it increases the ease with which new capital may be captured and transferred to business enterprises in a rapidly growing state. The disadvantages lie in the errors and the disequilibria likely to arise as a result of the very ease with which capital can be accumulated by forced saving, as well as in the dangerous inflationary results which are its necessary accompaniment.]

[The effective distribution of existing capital is accomplished by commercial banks in two ways. First, the banker, in self-protection, must seek to make his loans to the best borrowers, who are, of course, those who offer the best rates of interest compatible with good security, and who are therefore persons or firms in a position to utilize borrowed funds most profitably and effectively. Thus the banker is instrumental in getting capital into good hands. In this respect, however, the commercial banker is in no different position from the savings banker. But in another

² If borrowers utilize borrowed funds to purchase products of previously idle productive equipment and labor, capital is created in place of idleness and may not properly be said to result from forced saving.

respect his function is different. A very large part of the loans of commercial banks are intended to care for the short-time capital needs of business. Quite irrespective of changes in the total volume of commercial bank loans and deposits, the loanable funds are shifted from one borrower to another as needs arise. It is apparent that this is of immediate advantage to businessmen, who are thereby enabled to operate with a smaller volume of capital funds, either owned or borrowed at long term, since they can borrow short-term funds to care for seasonal and irregular needs. Thus the commercial bank may be said to economize in the use of capital funds by enabling businessmen to dovetail their short-term capital needs. It does not necessarily follow, however, that this saving to the businessmen is advantageous to the economic system as a whole. To prove the existence of any general economy, it must be demonstrated either: (1) that the opportunity for short-term loans reduces the volume of idle capital goods; or (2) that it increases the efficiency in the distribution of capital funds and goods. At first glance it appears that the reduction in the volume of fixed capital required by businessmen must bring a reduction in idle capital goods. But idle cash capital is not the same thing as idle capital goods. If businessmen were unable to make short-term loans but instead carried more idle cash in off-season periods, they would still release short-term capital to others by restraining their purchases at times when others were in need. The liquid capital goods supply would still be mobile and free to change its direction at the summons of new buyers who had previously been holding off the market. We must, therefore, look elsewhere for the special advantage arising from commercial banks.

The peculiar service performed by the commercial bank arises from its power to introduce flexibility into the capital equipment of businessmen. It is a well-known fact that the economic system is in a constant state of flux. Demand for the products of different firms and industries is con-

tinuously varying, both with seasonal changes, which are partially predictable, and with the quite unpredictable changes in agricultural output, styles, popular tastes, and costs of production. In order that these changing demands may be met, it is necessary that capital funds be shifted from industries with declining demand to those with an increasing demand. Such shifts, if predictable, might take place easily without resort to short-term loans. But even seasonal changes can by no means be accurately forecast. Variations in crops, temperatures, and length of seasons make for changing and uncertain seasonal requirements, while variations arising from the dynamic, growing nature of economic life introduce a large unpredictable element into the capital requirements of individual firms.

Let us examine the situation which would arise in the face of these unpredictable changes in capital needs in a society not provided with short-term loan facilities. Let us assume that there has been a decline in the demand for the services of fruit canners, owing to a fruit shortage, and an increase in the demand for the services of dealers in and processors of grain, arising from a large grain crop. Under these circumstances the canners will reduce their scale of operations and in so doing increase their hoards of cash capital. With no access to short-term loans, the grain dealers and processors would be confronted with the task of expanding their purchases of grain, labor, and supplies within a short period of time, with only the cash capital which they estimated as sufficient for an ordinary and smaller supply. (We may properly assume that they would not be able to increase their cash capital to meet the emergency by borrowing in the long-term capital market.) The results could only be a disastrous depression of the market price of grain owing to causes quite remote from the long-run effects of consumers' demand. In addition to the effect on grain prices and market, the lack of a short-term loan market has its depressing effects arising from the fruit canners' position of increased cash hoarding. This with-

holds from the pockets of ordinary consumers cash funds which normally would be spent. The reduction in consumers' incomes would reduce by that amount the monetary demand for consumers' goods.

On the other hand, if commercial banks have loaned to the canners, the slump in canning will permit the canners to reduce their borrowings at the banks, which in turn can advance funds to the grain interests. As a result, there will be much less effect on the volume of funds in consumers' hands (since reduced spending by canners is offset by increases in the grain market). Short-term loans are essential to an easy, smooth adjustment to meet the assumed conditions. The same argument holds in respect to the development of any industry at the expense of another, an everyday occurrence in a dynamic society. Here, too, the short-term loan market permits one industry to relinquish part of its capital and another to gain it with a minimum of disturbance. Even when a growing industry needs capital from the long-term market, the short-term loans of the commercial banks (whether or not they result in forced saving) hasten the process by advancing funds to security underwriters and others in the security market.

CHAPTER II

THE NATURE OF A BANK

Not only do banks act as channels through which funds flow from depositors to borrowers, but they also guarantee that the depositors' funds will not be lost. In order to accomplish this, it is necessary that a bank possess capital assets of its own, out of which it can make up losses that may occur through the default of borrowers. This capital constitutes the owners' equity or investment in the bank.

Type of organization. Two types of business organizations are found among banks. In the first and more common type the organizers of a bank obtain either a Federal or a state charter by conforming with the requirements of the general incorporation laws regulating the organization of banks. In the second type of organization the organizers operate a private, unincorporated bank. The advantage of the latter type of bank has frequently been: (1) ease and simplicity of organization; (2) freedom from the capital requirements placed upon incorporated banks; and (3) freedom from supervision and regulation. Although there have been many exceptions, unregulated private banking has, by and large, proved unfortunate to the depositors and to the public, so that some measure of control has generally been set up. Such regulation varies from complete prohibition of any private banks to supervision over the private banking practices. The Banking Act of 1935 provides that no concern other than a regularly supervised bank may accept any deposits except those from its own employees unless it submits to an examination by the banking author-

ity of the state, territory, or district in which it operates, and unless it publishes periodic reports.

Incorporation of banks not only benefits the public by subjecting banks to more strict regulation, but is also of obvious advantage in raising the necessary volume of capital. The organizers of banks have a choice between state and Federal charters. Banks organized under the banking laws of a state are called "state banks," while those organized under the Federal laws are called "national banks." The type of charter which is preferred depends somewhat upon the kind of banking in which the organizers expect to engage. For example, if a nonstock mutual savings bank is to be organized, it must be done under state laws. Also, if a bank wishes to engage extensively in lending on real estate security, the opportunities are frequently greater under state than under Federal law. Likewise, capital requirements are sometimes less rigid under state than Federal law, and the supervision of state banks has frequently been less strict.

Bank stock. Before 1933 the owners' capital in banks was obtained exclusively by the sale of common stock. Such stock was subject to double liability in the case of national banks, a provision generally applicable to state banks as well. This meant that in case of failure the stockholders might be assessed an amount equal to the par value of their stock to help reimburse the depositors. Further, banking laws generally provide that in case a bank suffers losses great enough to reduce the stockholders' equity below the par value of the capital stock, the stockholders must pay in an amount sufficient to replace the deficiency. The double liability provision has not proved to be of any great benefit to depositors of closed banks. When occasion arose, therefore, in 1933, requiring the sale of a large amount of capital stock to rehabilitate banks which were in trouble, it seemed advisable to abolish double liability in order to enhance the attractiveness of the new stock issues. Consequently the Emergency Banking Act of 1933 provided that

new stock sold by national banks should be free from double liability. In 1935 the national banking law was amended further to enable national banks to terminate double liability on all stock on July 1, 1937 or later, after publication of six months' notice. The double liability requirement on state bank stock is written into the constitutions of many states, and its removal, consequently, must wait upon constitutional amendment.

The emergency of 1933 required more additions of capital to those banks reopening after the banking holiday than could readily be obtained by the sale of common stock to the general public. Consequently national banks were empowered to issue nonassessable preferred stock, free from double liability, for sale to the Reconstruction Finance Corporation. State banks also (where permitted by law) sold preferred stock or capital notes and debentures to the RFC.

Another means of increasing the capital funds of banks is provided in laws requiring the accumulation of a surplus which represents additional contributions of stockholders. The national banking laws were amended in 1935 to require that any newly organized national bank must have a paid-in surplus equal to 20 per cent of its capital before it may commence business.¹ Further, a national bank must devote not less than one tenth of its net profits to surplus until the latter is equal to the common stock.

The Bank Statement

It may almost be said that a bank is a bookkeeping institution which shifts paper claims about among various individuals or business houses. It receives, as deposits, claims against other banks. It makes loans through mere book entries. The number of employees engaged in keeping the accounts and signing orders may exceed the number engaged in handling various forms of money. Consequently an understanding of a bank's operations may perhaps best be derived by beginning with an analysis of the results of these

¹ This does not apply to state banks which are being converted into national banks

bookkeeping activities in the form of a statement of the bank's resources and liabilities. Such a statement gives a cross-section view of the bank's affairs as they exist at the time the statement is drawn up and thus affords the student of banking a glimpse of the banking function.

Bank statements, as such, are common enough to excite little interest in the mind of the man in the street. Published statements of national banks appear regularly in the home-town newspapers at the date when the Comptroller of the Currency calls for reports. These reports must be made at least three times a year or oftener, as the Comptroller may require. Similar reports appear for the state banks. In spite of the relative frequency of these published reports, they are usually of slight value to bank customers who are anxious to learn something of the affairs of the bank with which they deal. This is true for several reasons. First, the average person is not conversant enough with banks and banking affairs to understand the significance of the items appearing in the published report. Moreover, many banks combine the items making up their resources and liabilities in such a way that even an expert would be unable to discover the real position of the bank. Finally, the reality of the picture of the bank's affairs given by the bank statement depends upon the accuracy of the accountant's estimate of the value of the bank's resources and the completeness of his enumeration of its liabilities. Banks sometimes operate for a number of years without writing off their losses. When this happens, the resources of the bank appear larger than they actually are, and the bank may retain the confidence of the public even when the real conditions do not justify it. Some conservative bankers conceal certain assets such as real property owned by the bank. Some years ago, a prominent Chicago bank evaluated its bank building, containing much valuable office space and located at an important corner of the Loop, at the sum of one dollar.

Although the bank statement may often reveal less of the

desire, it is nevertheless a valuable device for giving an idea of the manner in which banks operate. The following bank statement illustrates the usual form of published statement, which gives the outsider little clue to the details but states its facts in broadest outline.

REPORT OF THE CONDITION OF CONTINENTAL ILLINOIS
BANK AND TRUST COMPANY

(September 24, 1930)

Resources

1. Cash, other cash resources, and due from banks	\$185,005,274.31
2. U S Government investments	79,050,306.76
3. Other bonds and securities	99,798,177.80
4. Loans on collateral security	556,019,500.36
5. Other loans	183,900,682.39
6. Loans on real estate	11,749,550.24
7. Overdrafts	67,718.12
8. Other real estate	204,347.17
9. Banking house	15,000,000.00
10. Customers' liability under letters of credit	30,076,496.30
11. Customers' liability account of acceptances	37,442,219.17
12. Other resources	46,770,177.38
Total resources	\$1,245,804,450.00

Liabilities

1. Capital stock	\$75,000,000.00
2. Surplus	65,000,000.00
3. Undivided profits	8,808,682.39
4. Reserve accounts	24,505,981.42
5. Demand deposits	473,519,078.30
6. Time deposits	277,036,377.06
7. Due to banks	207,842,581.11
8. Dividends unpaid	19,202.00
9. Letters of credit	31,096,566.68
10. Bank acceptances	37,794,844.28
11. Other liabilities	45,181,136.66
Total liabilities	\$1,245,804,450.00

The detailed statement. The statement below in the form required in reports to the Illinois State Banking Department gives more details of the operations of banks. Such detailed statements as these are not published for individual state banks.

AGGREGATE RESOURCES AND LIABILITIES OF 118 STATE
BANKS IN CITY OF CHICAGO AT CLOSE OF BUSINESS
JUNE 30, 1931

<i>Resources</i>		
Cash on hand		\$25,543,766 08
<i>Other cash resources</i>		
Checks and other cash items	\$3,633,356 12	
Collections in transit	45,776,946 14	
Exchanges for clearing house	33,549,985 61	82,060,287 87
<i>Due from banks</i>		
State	\$61,464,537 81	
National	85,477,253 19	
Private or foreign	5,906,968 80	
Federal reserve bank	100,235,545 40	253,104,295 20
U. S. Government investments		286,512,249 09
<i>Other bonds and securities</i>		
State, county, and municipal bonds		59,741,703 46
Other bonds (and stocks, if any)		206,971,554 51
Stock of Federal reserve bank		5,676,750 00
<i>Loans</i>		
On collateral security	\$638,234,708 13	
Other loans (unsecured)	345,808,506 96	
Loans on real estate (including real estate bonds)	97,846,775 24	1,081,889,990 33
Overdrafts		130,596 19
Other real estate		2,382,195 84
Banking house, furniture and fixtures		30,952,391 20
Customers' liability under letters of credit		22,681,183 74
Customers' liability under acceptances		39,840,399 39
Other resources		68,548,044 52
Total resources		\$2,106,935,407 37
<i>Liabilities</i>		
Capital stock		\$153,612,500 00
Surplus		115,085,500 00
Undivided profits		31,192,878 85
<i>Reserves</i>		
For taxes and interest		18,317,853 42
For depreciation, buildings, and fixtures		1,003,503 12
For bond depreciation		3,219,967 74
For contingent fund		19,709,508 94
<i>Demand deposits:</i>		
Subject to check	\$728,184,031 57	
Demand certificates	8,128,381 04	
Cashier's checks outstanding	11,435,218 83	
Certified checks outstanding	4,665,086 57	752,412,718 01

<i>Time deposits</i>			
Savings, subject to notice	\$638,028,300.46		
Time certificates	78,558,976 75	\$710,587,277 21	
<hr/>			
<i>Due to banks</i>			
State	\$117,070,957 52		
National	85,631,008.31		
Private or foreign	25,479,967 07		
Federal reserve	1,409,392 56	229,591,325.46	
<hr/>			
<i>Bills payable and rediscounts:</i>			
Bills payable	\$13,642,215 51		
Rediscounts	5,595,873 23	14,238,088.74	
<hr/>			
Dividends unpaid		1,093,201.75	
Letters of credit		23,950,176 12	
Bank acceptances		40,037,430.80	
Other liabilities		46,883,477 21	
<hr/>			
Total liabilities		\$2,166,035,407 37	
<hr/>			

Definition of bank assets. Although some of the entries appearing in this statement need no explanation, others deserve some special attention in order that their meaning may be understood.

1. *Cash on hand* consists of coin of various kinds and paper currency of all sorts.

2. *Other cash resources* are composed of the following:

(a) Exchanges for the clearing house consist of checks deposited or cashed at the bank during the course of the previous business day, which are drawn on other banks located in the city or immediately surrounding territory and affiliated with the local clearing house. These checks will be presented through the clearing house to the banks on which they are drawn at the next clearing period.

(b) Collections in transit include checks, drafts, and other items (payable in another city) for which the bank has given the depositor credit but which are not yet collected. When these checks and drafts are acquired, they are sent

to the transit department, where proper disposal is made of them for collection. They may be sent to the Federal reserve bank of the district if the bank is a member or clearing nonmember; they may be sent to a city correspondent; or they may be sent directly to the bank on which they are drawn for payment.

- (c) Checks and other cash items consist of local checks and drafts drawn on banks which are not members of the local clearing house. Miscellaneous cash items such as bond coupons, for which depositors get immediate credit, may also be included.

3. *Due from banks.* The amounts due from banks represent deposits carried with other banks. These are mainly demand deposits, although occasionally banks carry reserve funds, which will be needed at some definite later date, as time deposits in order to earn interest. The member banks carry their legal reserve funds as a deposit with the Federal reserve banks. In addition, they frequently carry funds on deposit with their correspondents in Chicago, New York, or any other large city with which they have banking relations. These balances furnish convenient means for facilitating the collection of checks drawn on banks in distant areas. The banks carrying these reserve balances often undertake to collect checks drawn on banks in their districts and credit the amounts realized to the depositing bank's account. Likewise, when checks drawn on the local bank appear in distant cities and are sent home for payment, the local bank may remit amounts due by drawing drafts on its account in the city correspondent bank. Thus we see the item "due from banks" performing a three-fold function by acting as reserve funds, earning interest (sometimes), and furnishing a means for handling the collection of checks.

4. *U. S. Government securities.* This item constitutes a part of the bank's secondary reserve, which can be readily turned into cash by sale in the open market.

5. *Other bonds and securities* comprise:

- (a) State, county, and municipal bonds, which represent conservative investments, less liquid than U. S. Government securities.
- (b) Stock in the Federal reserve banks, which consists of the shares which member banks must own to qualify for membership.
- (c) Other bonds and securities are made up of:
 - (1) Public service corporation bonds.
 - (2) Industrial corporation bonds.
 - (3) Stocks in joint stock land banks, stock in affiliated companies (held for purpose of control), and where the law permits, other stocks held for any reason.

6. *Loans*, sometimes called "Loans and Discounts," include the promissory notes and bills of exchange, secured and unsecured, offered to the bank in return for borrowed funds.

7. *Overdrafts* are asset items in the form of claims against depositors who have overdrawn their accounts. The bank has paid the overdraft and charged the amount against the depositor.

8. *Banking house, furniture and fixtures* include the property owned by the bank and used for carrying on banking functions.

9. *Other real estate* usually has been acquired by the bank as a result of mortgage foreclosure and is being temporarily carried by the bank until it can be disposed of on favorable terms.

10. *Customers' liability under letters of credit*. Customers of the bank who wish to import goods from abroad may find it desirable to obtain a banker's letter of credit, in which the bank agrees to accept and pay a draft drawn upon it by the foreign exporter, if the draft is drawn for the proper amount and accompanied by the proper documents of title to goods sold and shipped. The customer

for whose benefit this letter of credit is sent is obligated to reimburse the bank. This gives rise to the item above.

11. *Customers' liability under acceptances.* When the drafts drawn under letters of credit described above have been accepted, the draft becomes an acceptance, and the customer's liability is consequently an obligation to reimburse the bank when the acceptance matures and is paid.

12. *Other resources* include a miscellaneous group of assets. Among these might be included accrued interest on loans and on bond investments.

Definition of bank liabilities. The bank's liabilities may be divided into the three following classes: (1) deposits and liabilities to creditors; (2) reserve accounts or necessary deductions ahead of the stockholders' equity; and (3) the stockholders' equity.

1. *Demand deposits* comprise the following items:

- (a) Those which are subject to check and represented by entries in the customers' pass book.
- (b) Demand certificates of deposit, which are non-interest-bearing certificates sometimes used instead of cashier's checks and certified checks for making payments.
- (c) Cashier's checks outstanding, which are checks drawn on the bank by the cashier and issued to customers desiring an acceptable form of negotiable instrument or in payment of obligations of the bank itself.
- (d) Certified checks outstanding which arise from the request of depositors that checks drawn be certified by the bank. This binds the bank and makes the check acceptable, since the bank cannot afterwards refuse to honor the check because of stop orders, forgery, or insufficient funds. On certifying a check, the bank protects itself immediately by deducting the amount from the depositor's account.

2. *Time deposits* comprise:

- (a) Saving deposits, as evidenced by a pass book. They may be made at irregular intervals with interest allowed and computed at semiannual intervals (or oftener).
- (b) Time certificates of deposit, which represent the deposit of larger sums payable with interest at some stated date or upon notice of thirty days or more.

3. *Due to banks.* The amounts due to banks (state, national, private, or foreign) constitute the balances of such banks deposited with this bank. The amount due to the Federal reserve bank represents items sent to the bank by the reserve bank for collection, for which proceeds have been received but remittance not yet made. The item "due to banks" would also normally include certain sums due other banks for checks received for collection but not yet remitted.

4. *Letters of credit and bankers' acceptances* are liabilities incurred either through the sending out of letters of credit authorizing the drawing of drafts on the bank by travellers or foreign exporters, or through the actual acceptance of drafts after presentation.

5. *Bills payable and rediscounts* combined represent the volume of funds procured by the bank through borrowing or sale of indorsed commercial paper. It is obvious that bills payable are properly classified as liabilities. Rediscounted paper is also so classified, because the bank's indorsement thereon establishes its liability for ultimate payment in case the primary obligor fails to pay.

6. *Reserves* constitute the second general class of liabilities. These represent various deductions which must be made from the assets, in addition to the deduction of general liabilities to outsiders listed above, before a proper figure for the stockholders' equity can be ascertained. Among the reserves are:

- (a) Reserves for taxes accruing before tax-paying time.
- (b) Reserves for interest accruing on deposits.

- (c) Reserves for depreciation of buildings, furniture, and fixtures.
- (d) Reserves for depreciation of securities.
- (e) Reserves for contingencies—losses on bad loans and securities. These have been used to a great extent during the last few years to care for the losses realized by banks.

7. *Capital stock, surplus, and undivided profits.* Finally, there is the liability of the bank to the stockholders. This liability, or the stockholders' equity, may be obtained by deducting from the total resources all the liabilities to outsiders, including the sundry reserve accounts. The remainder belongs to the stockholders. From this should be separated unpaid dividends, which are not, properly speaking, a part of the stockholders' equity. From the remainder it is customary to deduct the par value of the capital stock. The stockholders' equity over and above the capital stock is represented by the surplus and the undivided profits account. As the current operations return profits to the bank, they are credited to the undivided profits account, from which will be paid all dividends. Part of the profits remaining after dividends are paid are then transferred from undivided profit to surplus, as a means of serving notice upon dividend-hungry stockholders, as well as the general public, that such amounts are to remain as permanent additions to the stockholders' investment in the bank.

CHAPTER III

THE BANKER AND CREDIT INSTRUMENTS

The banker's stock in trade consists largely of negotiable credit instruments. The deposits which he receives consist mainly of checks, drafts, and paper currency, all of which are negotiable. Only specie and minor coin are not negotiable in form, yet they, too, have some of the characteristics of bearer-demand negotiable instruments. When the banker receives a deposit, he may create a negotiable instrument directly if he gives the depositor a negotiable certificate of deposit, or indirectly if he enters the amount on the depositor's pass book so as to entitle him to draw checks. The loans and investments of a bank are in the form of negotiable instruments. It is evident, therefore, that the rules governing negotiable instruments are of great importance both to the bank and to those who deal with it.

Types of negotiable instruments. Negotiable instruments fall into two main classes: (1) promises to pay, which include promissory notes and certificates of deposit; and (2) orders to pay or bills of exchange. The latter may in turn be classified as: (a) trade bills or orders drawn on buyers of goods and services by sellers; (b) drafts drawn on banks by customers under an agreement to accept and pay when due; (c) bank drafts or orders drawn by one bank on another, calling for the payment of a certain sum of money to the payee out of the drawer's account; and (d) bank checks. When trade bills are payable at some specific fu-

ture date, they may be presented to the drawee (the person ordered to pay) for acceptance. An acceptance consists of the signature of the drawee across the face of the bill, with or without accompanying words signifying that he will pay it when due. From that time on, the instrument is known as a *trade acceptance*. Drafts drawn on banks payable at some future date and accepted are known as *bankers' acceptances* or *bankers' bills*.

Test of negotiability. The law requires that a negotiable instrument: (1) be in writing and be signed by the maker or drawer; (2) contain an unconditional promise or order to pay a certain sum of money; (3) be payable on demand or at a fixed or determinable future time; (4) be payable to order or bearer; and (5) when addressed to a drawee, he must be named with reasonable certainty¹

Importance of negotiability. What difference does it make whether or not a credit instrument is negotiable? The answer is simply this: A person who receives a non-negotiable instrument by purchase and assignment obtains, like any ordinary assignee, only the rights under the instrument which the previous holder had. If the title of the transferrer was faulty in any particular, that of the transferee is equally faulty. For example, if the payee of a nonnegotiable instrument is unable to enforce it because he had been guilty of fraud in procuring the instrument, the person who received the instrument from such payee would also be unable to collect it for the same reason. However, a person who takes a *negotiable* instrument under such circumstances as to be considered a *holder in due course* may obtain better rights to collect it than had the person from whom he received it. This superior position of the holder in due course arises apparently from the fact that the courts are anxious to facilitate the use of credit instruments. Their acceptability is considerably enhanced by the protection afforded the holder in due course.

¹ Uniform Negotiable Instruments Act, Section I.

A holder in due course is one who has taken an instrument: (1) that is complete and regular upon its face; (2) before it became overdue and without notice of any previous dishonor; (3) in good faith and for value; and (4) with no notice of any infirmity in the instrument or defect in the title of the person negotiating it.

Defenses against payment. The obligor of a negotiable instrument may refuse to pay and may set up a variety of defenses. These defenses fall into two classes, the first of which comprises those which are good and effective against any and all holders of the instrument, whether or not an innocent holder in due course. These defenses are absolute, or legal, as they are sometimes called. Under the absolute defenses come: (1) forgery, (2) infancy, (3) insanity, or (4) lack of delivery of an incomplete instrument. The other type of defenses is known as *personal defenses* and is available only against the immediate parties to the instrument or some person other than a holder in due course. The latter is entirely free from defenses of this class. The personal defenses are: (1) fraud, (2) lack of delivery, (3) lack of consideration, (4) wrongful filling out of an incomplete instrument, (5) conditional delivery when the condition has not been fulfilled, (6) illegality, and (7) duress.

Material alteration. A material alteration of a negotiable instrument may consist of changes in: (1) the date, (2) the sum payable, (3) the time or place of payment, (4) the number or the relations of the parties, and (5) the medium or currency in which payment is to be made. It may also consist of the addition of a place of payment where none is specified, or any other change altering the effect of the instrument.

✓ When a negotiable instrument is materially altered without the consent of all the parties liable thereon, it is void, except against any person who assented to or participated in the alteration, or against subsequent indorsers. However, a holder in due course who is not a party to the alter-

ation may enforce payment according to the original tenor of the instrument.

Indorsement. A transfer of title to a negotiable instrument involves: (1) delivery alone by one having title, if the instrument is payable to bearer (except that a holder in due course gets title even if the transferrer has no title); and (2) indorsement and delivery if the instrument is payable to a certain person or order. There are four common types of indorsement, of which the first is *indorsement in blank*. This consists of the mere signature of the indorser, and passes title with delivery. In addition to passing title, the indorser warrants that: (1) the instrument is genuine and in all respects what it purports to be; (2) that he has good title to it; (3) that all prior parties had capacity to contract; and (4) that the instrument at the time of his indorsement is valid and subsisting. Further, he promises that the instrument will be paid if properly presented when due. If the instrument is dishonored and proper notice is given of the fact, the indorser must pay it. After an instrument has been indorsed in blank, it becomes a bearer instrument, negotiable by mere delivery. A second type is the *restrictive indorsement*. This consists of the indorser's signature, accompanied by some expression which prohibits the further negotiation of the instrument. For example, an instrument indorsed "for collection" or "for deposit" is restrictively indorsed. The person taking an instrument so indorsed is presumed to have been aware of it and holds the instrument as the agent of the indorser; any proceeds realized are held in trust for the indorser. Thus a person taking an instrument bearing a restrictive indorsement cannot become a holder in due course. A third type is the *special indorsement*, specifying the person to whom or to whose order the instrument is to be payable. Its further negotiation requires the indorsement of the indorsee. In case one to whom an instrument is specially indorsed transfers the instrument without indorsing, the transferee is en-

titled to the indorsement necessary to pass title. A *qualified indorsement* is the fourth variety. This results when the indorser adds to his signature such words as "without recourse," indicating his unwillingness to be bound for payment in case the instrument is dishonored. However, such an indorser assumes full liability for the warranties made by an indorser in blank.

Liability of the parties. The duty of the person of primary liability to pay a negotiable instrument may be qualified by the personal defenses if the instrument is not in the hands of a holder in due course, and in any event by legal defenses. Of the legal defenses, perhaps one of the most common is a forgery in the line of title. The holder in due course cannot recover if he is claiming either through a forgery of the maker's name (if a promissory note) or, in the case of any order instrument, a forgery of the name of the payee or anyone else to whom the instrument is specially indorsed. Moreover, if he receives payment and the forgery is subsequently discovered, the holder must refund the money received. But if a holder in due course presents a bill of exchange to the drawee for acceptance, and the drawee accepts, the holder in due course may enforce payment from the acceptor even though it later appears that the drawer's name was forged. Further, if a holder in due course of a check presents it to the drawee bank for payment, and receives payment, the bank has no recourse against the holder if it later discovers that the drawer's name is forged. This arises from the fact that when the drawee of a bill of exchange accepts (or pays) the same, he promises to pay (or actually pays), and admits the existence of the drawer, the genuineness of his signature, and his capacity and authority to draw the instrument.

. In order to bind an indorser of a check on his promise to pay the instrument if dishonored, the check must be properly presented and notice of dishonor sent to the indorser. A check is deemed to have been presented in suf-

sufficient time to bind the indorsers if it is presented within a reasonable time after its last negotiation. Thus a holder in due course may protect himself by starting presentment, either by turning the instrument over to his bank or by other means, within the next business day after receiving it. In case of dishonor, notice must be sent to each indorser against whom the holder desires recourse. Notice of dishonor may be either in writing or oral, and given in any terms sufficient to identify the instrument and indicate its dishonor. When the holder gives notice of dishonor to one party, all other parties subsequent to the one notified may benefit from the notice. Notice of dishonor must be started so as to reach the party notified within the next business day if the parties live in the same place. Where the parties to the notice reside in different places, notice of dishonor must be deposited in the post office in time to go by mail the next business day, or, if there is no mail at a convenient hour on that day, by the next mail thereafter. If notice is not sent by mail, it must arrive within the time at which notice properly sent by mail would have arrived. Whenever notice is properly addressed and deposited in the post office (or box), the sender has given sufficient notice, even if the notice never actually arrives. A party receiving notice of dishonor has, after its receipt, the same length of time as the original holder for notifying and binding antecedent parties. Notice of dishonor may be waived.

A dishonored bill of exchange drawn or payable in another state (that is, a foreign bill) must be "protested"; otherwise the drawer and indorsers will be discharged. The protest must be annexed to the bill or contain a copy thereof and be under the hand and seal of a notary. It must contain the time, place, and fact of presentment and be sent as notice of dishonor to parties to be held. Any person liable on a bill to subsequent indorsees may waive protest, and this act also waives presentment and notice of dishonor.

Delay in the presentment of checks (unlike other forms

of bills of exchange) discharges the drawer only to the extent of the loss which he suffers as a result of such delay. If the drawer has suffered a loss due to the failure of the bank on which the check was drawn, he can be held for payment only if presentment was made within a reasonable length of time *after the check's issue*. Most courts hold that to be within a reasonable length of time, presentment must be started within the next business day after the check has been received by the payee.

CHAPTER IV

DEPOSITS

Importance of Deposits

Deposits and the bank's lending power. The lending power of any bank is determined by its available funds. These in turn are determined by the capital contributed by the stockholders and the deposits of the bank's customers. Not all of the bank's deposits may be lent, for experience and the law require that some cash be kept available to meet the demands of depositors. Fortunately for the banker, the cash or cash reserves need be but a fractional part of the bank's deposits. By the law of averages, new deposits by some depositors offset the withdrawals of others, so that there is slight probability that the bank will experience any large loss of cash in any normal business day. Profitable banking requires that these reserves be kept at the lowest practical limit in order that the loanable funds derived from deposits shall be at a maximum.

Since the loans of a bank are so directly dependent upon the volume of deposits which the bank can obtain, the bank quite naturally will attempt to expand its deposits. Moreover, other things being equal, the greater the bank's deposits per dollar of capital invested by the stockholder, the more profitable the bank will be for its owners.

Relation of deposits to capital. This quite natural tendency of bankers to expand deposits as far as possible on the basis of a given volume of capital is held in check by certain considerations. First, there is the necessity con-

fronting the banker for commanding public confidence by showing a satisfactory relation between his own invested capital and deposit liability. The stockholder's own investment, with the liability, if any, for 100 per cent assessment in case of failure, stands between the depositor and loss. Disregarding the question of ability of the bank to pay on demand, the ultimate solvency of a bank is assured by the fact that the depositors cannot lose so long as losses resulting from bad loans do not exceed the stockholders' investment. The capital fund, including the surplus and to a limited extent the undivided profits,¹ constitutes a guaranty fund for the benefit of depositors.

The banker must maintain a guaranty fund of sufficient size to command public confidence in the security of deposits placed in his bank. The responsibility for this rests largely on his own shoulders, for American banking laws have generally failed to cover this particular point. There are no requirements of this kind applying to national banks. The 1933 Financial Institutions Act of Indiana provides that, after three years from the time of the enactment of the act, a bank's deposits shall not be in excess of ten times the amount of the unimpaired capital and surplus.² The absence of specific legal regulations, however, does not mean that the banker is entirely free to determine the ratio of deposits to capital funds. Supervising and examining officials exercise their influence in the direction of maintaining adequate capital investment by the stockholders.

Obtaining Deposits

Competitive methods. Subject to the limit set by the bank's capital and surplus, the banker is free to attract deposits in any way possible. He may erect an imposing building whose entrance is flanked by marble pillars, sym-

¹ A portion of the undivided profits may be expected to be withdrawn for dividend payment and hence is not actually a part of the permanent contribution of the stockholders.

² Section 217.

bolds of strength. He may expand the free services and conveniences available for his customers. He may advertise, in a restrained and dignified manner, on billboards and in newspapers. He may organize a "new business department" whose function is to make contacts with new customers. He may persuade the stockholders to elect a prominent business executive to the board of directors in order that all or part of his firm's deposits may be captured. Finally, he may compete with other bankers for deposits in a more direct way by offering higher rates of interest on deposits. This last form of competition has been especially important. A good many depositors are influenced by the interest payments and respond favorably to offers of higher returns. Insofar as this is true, all banks are forced to some extent to offer higher rates to depositors. This reduces the profits of banking to such a degree that the banker seeks to increase his earnings by turning to less conservative types of loans and investments. Perhaps if all bankers could be trusted to refuse to make unsafe loans under the stress of competition and profit-seeking, unlimited competition for deposits among bankers would have no dire results. What borrowers would pay for well-secured loans would fix the limit on interest payments to depositors. In actual practice, however, the banker cannot be trusted to watch competition cut into his profits without taking some action to prevent it. He may seek more speculative loans and investments bearing a higher rate of return. The evil consequences of such action are concealed during periods of prosperity, but depression reveals them. Experience has repeatedly shown the fatal results of such competition. To guard against excessive competition for deposits, clearing house associations have sponsored agreements among their members regulating competitive practices. Particularly, they have attempted to control the charges made by banks for services rendered to customers and the payment of interest on deposits. The banking acts of 1933 and 1935 recognized the need for regulation of competitive interest pay-

ments by prohibiting member banks from payment of interest on demand deposits and providing that the maximum rate of interest paid on time deposits should be set by the Board of Governors of the Federal Reserve System. Further, it regulated the withdrawal of time deposits.

Regulation of interest payments. In December, 1935, the Board of Governors of the Federal Reserve System issued an amended form of Regulation Q, governing the payment of interest on deposits of member banks. Because the law prohibits all interest payments on demand deposits, a difficult question arose as to what was meant by "interest." For example, is the performance of valuable collection services for the depositor a form of interest payment? If there were no limits to such free services, the way would be opened for interbank competition, which the law intended to prevent. On the other hand, the task of laying down rules for determining the amount of such free services to be allowed was a complicated one. The board's first regulation defined interest as all "payment, credit, service, or other thing of value made or furnished by a bank as consideration for the use of the funds constituting a deposit and which involves the payment or absorption by the bank of out-of-pocket expenses. . . ." Payment or absorption of trivial and irregular expenses incurred for the depositor was not to be considered payment of interest where collection of a fee from depositors would cause "undue friction or misunderstanding," provided the bank acted in good faith in not using such practices as a means of competition. This rule proved objectionable from two standpoints. First, member banks complained that its enforcement would drive the accounts of country banks into the hands of non-member banks. Second, it was extremely difficult to apply. Consequently its application was postponed, and the rule was finally abandoned altogether. In its place the Board of Governors, with the collaboration of the Federal Deposit Insurance Corporation, which is in control of interest payments on the deposits of nonmember insured banks, formu-

lated a definition of interest. (According to this definition interest is any payment to or for the account of any depositor as compensation for the use of funds on deposit.) The troublesome question of free services is thus avoided. Instead, the question of what constitutes interest payment in any particular case is left for "administrative determination under the general law in the light of experience, and as specific cases may develop."

Payment, either directly or indirectly, of interest on demand deposits is prohibited except on deposits made by savings banks or deposits of public funds where the state law requires the payment of interest. Even in these cases, interest payments must cease on August 24, 1937. Demand deposit contracts made before June 16, 1933, calling for interest on deposits, may be observed but not renewed. Similar prohibitions apply to nonmember insured banks.

Time deposits are subject to two limitations as to interest payments. First, member banks may pay no more (but may, of course, pay less) interest than that prescribed by the Board of Governors. Second, they may pay no more than the maximum rate permitted to state banks and trust companies. On January 1, 1936, interest on deposits could not exceed $2\frac{1}{2}$ per cent (compounded quarterly) on savings, time postal savings, or time deposits originally made with six months' maturity or payable upon at least six months' written notice. These limits do not apply to certificates or contracts in force before December 18, 1934, and not legally terminable by the bank. Time deposits having maturity dates of less than six months and not less than ninety days from the date of deposit (or payable on written notice of such a period) could bear not over 2 per cent interest, compounded quarterly. Time deposits with a maturity date of less than ninety days and not less than thirty days (or payable on written notice of such a period) could bear interest of not over 1 per cent, compounded quarterly. Time deposits which have reached maturity or upon which required notice has been given and fulfilled are payable on

demand and bear no interest. Under the 1935 banking act the Board of Directors of the Federal Deposit Insurance Corporation is empowered and directed to put into force regulations on the payment of interest by nonmember insured banks.

Withdrawal of time deposits. Not only are banks limited in their interest payments, but they are also subject to regulation as to the withdrawal of time and savings deposits. Section 19 of the Federal Reserve Act, as amended in 1935, prohibits the payment of time deposits before maturity, except in accordance with such rules and regulations as may be prescribed by the Board of Governors, and prohibits the payment of any savings accounts without notice unless all savings accounts are similarly payable. Likewise, time deposits payable on notice (except savings) are not to be paid until the expiration of the period of notice. However, the regulation of the board permits the payment of time deposits before maturity or the fulfillment of the notice period, provided the depositor makes a written application showing that such payment is necessary to prevent "great hardship" in meeting an emergency. Such application must be approved by an officer of the bank and kept on file. On such withdrawals the depositor loses up to three months' accrued interest. Similar regulations of the Federal Deposit Insurance Corporation apply to nonmember insured banks. Banks may make loans on time deposits and savings deposits on which notice of withdrawal is enforced at rates not less than 2 per cent per year above the rate being paid the depositor by the bank.

Relation of the Depositor to His Bank

Creation of a deposit. Deposits in a commercial bank may be established in either of two ways. First, they may be created by the bank as a result of the extension of a loan to the customer. Such deposits are of a peculiarly ephemeral character, since they are almost certain to be withdrawn shortly after their creation. The more stable de-

posits of a bank, however, consist of funds placed in the bank's care for safekeeping and convenience. These funds consist of cash and negotiable instruments payable in cash.

If the depositor brings cash, checks, or such other cash items as bank drafts, high-grade bond coupons, and the like, he receives immediate credit on his account for the full amount, less any deduction made by the bank for collecting out-of-town items. This credit is given subject to the actual collection of the proceeds by the bank. If the depositor brings in "collection items" such as notes of and drafts on business houses and less known bond coupons, the proceeds, less charges for the collection services, are credited to the depositor's account when realized.

Within the bank the funds deposited are handled in the appropriate manner. Checks on the bank itself go to the bookkeeping department to be deducted from the drawer's account. Checks on other banks in the same city are sorted as to banks, indorsed, and sent to the clearing house at the next clearing period. Checks on out-of-town banks are sorted according to the bank to which they are to be sent for collection, indorsed "pay to any bank or banker, all previous indorsements guaranteed," and properly recorded before being sent to the appropriate bank for collection. These checks may be sent to. (1) the Federal reserve bank of the district if the bank concerned is a member or a non-member clearing bank; (2) to a correspondent bank; and (3) to the drawee bank itself. Collection items received are forwarded to the Federal reserve bank or some correspondent bank, which will present the draft, note, or coupon for payment, and remit the proceeds, less any charges. The depositor's account is then credited with the proceeds on their receipt by his bank.

Obligations of the bank to the depositor. The deposit of funds with the bank gives rise to definite obligations. The bank becomes a debtor, since the depositor normally surrenders all rights to the funds deposited in return for the bank's promise to pay on demand or notice, as the case may

be. The bank is under contract to pay out the cash upon the bona fide order of the depositor to do so. This makes it essential that the bank verify the genuineness of the drawer's signature before paying, for if payment is made on a forgery, the bank naturally cannot deduct the amount from the depositor's account and cannot demand a refund from any innocent holder who may have presented the check for payment. Further, it must be certain that the payee's indorsement is genuine unless there is a subsequent indorsement of a responsible party upon which the bank can rely. This follows from the fact that not only must the bank make payment on the order of the drawer alone, but also must pay only to the payee designated, or to his order.

Other incidental responsibilities rest upon the bank. It must not pay a check before it is due; it must watch for discrepancies between the writing and the figures; and it must satisfy itself that the depositor has sufficient funds unless it is prepared to grant him an overdraft. Care must also be taken to observe any stop-payment order which may be given by the depositor, since failure to do so would cause the bank loss of the amount of the check involved. Finally, it may be called upon to certify checks for depositors who wish to make payments where ordinary personal checks would not be acceptable. Certification is the statement written on the check by the bank to the effect that the check will be paid. The amount of the certified check is immediately deducted from the depositor's account and constitutes an addition to "certified checks outstanding."

Classes of Deposits

Time versus demand deposits. A study of bank deposits is not complete without a more detailed consideration of the several types of deposits. Bank deposits may be classified in several different ways, the most common grouping being time deposits and demand deposits. The immediate

purpose of such a classification is to determine the reserve requirements of banks which belong to the Federal Reserve System, since the law requires only 3 per cent reserves against time deposits while the reserves against demand deposits must be 7, 10, or 13 per cent, depending upon the classification of the city in which the bank is located.³ Another important reason for such a division of deposits lies in the fact that, in general, time deposits are thrift accounts, less subject to irregular withdrawal and more free from heavy seasonal withdrawals than the demand deposits. Because of this, it is normally possible for a bank to tie up funds derived from time deposits in more or less long-time investments, combining a reasonably high yield with good security. This can be done, since a high degree of liquidity is not required. On the other hand, demand deposits should be invested mainly in liquid loans or readily salable paper. This is true even if the general level of demand deposits shows no great tendency to fluctuate, since potentially demand deposits of any one bank are less stable than the time deposits. It should be noted that some time deposits representing the surplus funds of businessmen are essentially the same as demand deposits. They are classified under the heading of time deposits to enable the bank to carry smaller legal reserves and offer interest to the depositor.

Section 19 of the Federal Reserve Act, as amended in 1935, authorizes the Board of Governors to define demand and time deposits for the purpose of determining legal reserve requirements. In the new Regulation D, effective January 1, 1936, the board has laid down the following definitions:

1. Demand deposits include all deposits except time deposits.

³ These are the basic statutory reserve requirements, which may be increased to twice this amount by the Board of Governors of the Federal Reserve System. On May 1, 1937, reserve requirements were raised to the maximum limit by action of the board.

2. Time deposits consist of three classes: (a) time certificates; (b) time deposits, open account; and (c) savings deposits.

3. Time certificates of deposit are deposits evidenced by an instrument (negotiable or nonnegotiable) payable at least thirty days after the date of the deposit or upon at least thirty days' written notice and on presentation and surrender of the instrument.

4. Time deposits, open account, are deposits other than time certificates or savings deposits, in respect to which there are written contracts to the effect that neither all nor any part may be withdrawn prior to a maturity date at least thirty days after the date of deposit or without thirty days' written notice.

5. Savings deposits must be evidenced by a pass book and consist of funds deposited to the credit of individuals (except partnerships operated for profit) or nonprofit organizations. Banks must have the right to require at least thirty days' written notice of withdrawal of such deposits. Payment is to be made only upon presentation of the pass book or directly to the depositor himself.

Kinds of depositors. A second type of classification of deposits is one based upon the kind of depositor, and may consist of the following:

1. Individual demand deposits, including deposits of business houses, and private business and personal accounts.

2. Governmental deposits including:

(a) Federal Government.

(b) State, county, municipal deposits, and deposits of other governmental subdivisions.

3. Bankers' balances (or due to banks), which represent the deposits of other banks maintained for the purpose of:

(a) Facilitating the collection of checks.

(b) Furnishing customers with city drafts.

(c) Obtaining interest on idle funds (no longer true unless on time deposit).

- (d) Facilitating the lending of money on the call market
- (e) Maintaining contacts with city correspondents to facilitate the sale of foreign exchange drafts.

Secured and unsecured deposits. A third type of classification might be made on the basis of secured and unsecured deposits. The ordinary depositor is merely a general creditor who shares in the remaining assets of a liquidated bank after the preferred claims have been met. The common method by which a banker prefers his creditors is through the acceptance of deposits requiring special security. Member banks which obtain deposits in excess of \$5,000 from the Federal Government must secure such deposits by pledging United States bonds or other approved collateral with the Secretary of the Treasury.⁴ Formerly, such deposits carried no legal reserve requirements. Since August 23, 1935, however, government deposits require the same reserves as other deposits. Similar regulations apply to deposits of state, county, and municipal governments. The deposit of funds by the trust department of a national bank with the banking department requires the setting aside by the bank of a sufficient amount of government securities to make certain that the trust department deposits are fully secured.⁵ The average depositor is seldom aware of the existence of depositors with preferred claims.

Perhaps it should be observed in passing that not only are the secured creditors preferred to that degree, but that there are other claims which take priority over those of ordinary depositors. Any bank which is compelled to borrow funds to maintain its cash position must give the lender special security. Assuming that the lending bank (or other institution) requires ample security from the borrowing bank, to that extent the lender is in a position of preference over the ordinary depositor. This is true whether the borrow-

⁴ Federal Reserve Act, Section 9, and Banking Act of 1935. Section 324 (d), amending Section 19, Federal Reserve Act.

⁵ Federal Reserve Act, Section 11 (k).

ing bank obtains funds from its city correspondent, from the Reconstruction Finance Corporation, or from a Federal reserve bank

Protection of Bank Depositors

It is a fundamental principle of banking that protection for the bank depositor must come from sound banking assets. It follows from this that the same general measures which are designed to protect depositors are also beneficial to the stockholders whose equity in the bank consists only of a residual claim against the assets.

The skill and honesty of the bank's management have a most important bearing upon the safety of the deposits. Barring some catastrophic upheaval in the economic life of the community, such as prolonged and acute depression, good bank management will adequately protect both the depositor and the stockholder. Because proper management is so essential to successful bank operation and because the public interest is so closely tied up with successful banking, the state has seen fit to interfere to a varying extent in banking affairs in every part of the world. In the United States, governmental interference has become very involved and complete. Under the state and national banking laws, as well as the laws governing the Federal Reserve System, there has grown up an enormous mass of minute regulations, the majority of which are designed to safeguard the depositors and stockholders of banks. They include the regulation of the volume of capital and reserves and the type of loans and investments; the examination of the bank's affairs by representatives of the state; and the publication of reports of condition. The nature of these regulations will be studied in more detail in connection with the discussion of the topics to which they are related. There are, however, two varieties of attempts to protect depositors which may well be examined here. They are: (1) the segregation of thrift deposits, and (2) the guaranty of deposits.

Segregation of thrift deposits. The advocates of segregation of thrift deposits propose that the deposits of a bank should be divided into thrift accounts and commercial accounts, each type to be kept entirely separate from the other. Funds derived from commercial deposits would then be loaned or invested as usual, while funds from savings or thrift deposits would be placed in a special account and invested in an appropriate manner. Preferably, the investment of thrift funds should be regulated by rules similar to those normally governing the investments of mutual savings banks. Finally, the assets acquired through the investment of thrift funds should be set aside for the sole benefit of the thrift depositors. Such a plan involves a complete departmentalization of banks so far as the two general types of deposits are concerned. It also should provide that a proportionate share of the bank's capital and surplus be allocated for the benefit of each type of deposits. This is essentially the plan provided by the laws of California.⁶ Although this results in what is virtually a separate bank for each type of business, there is still the advantage of combining the several different banking services under the same roof and under the same management.

What are the reasons for segregation? Perhaps the reason most frequently given is that segregation of assets behind thrift accounts is necessary to protect the thrift depositor in case of runs on the bank. Thrift accounts, like all time deposits, are payable not on demand but at a certain designated time, or after the expiration of a given length of time after notice of intention of withdrawal is given the bank. Normally such deposits have been payable on demand, but under pressure banks are able to resort to their legal privilege of postponing payment by refusing to pay time certificates until due and by requiring notice on savings

⁶ In 1926 eleven states required some form of segregation of savings deposit assets. These were California, Connecticut, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, Oregon, Rhode Island, Texas, and Wyoming. *Federal Reserve Bulletin*, 1926, Volume 12, p. 416.

deposits This puts the time depositors at a serious disadvantage in the event that confidence in the bank is impaired. The banker's efforts to remain open and regain lost confidence may result in a liquidation of the better assets to pay off the demand depositors, leaving the slow and perhaps poorer assets for the time deposits. Such situations have arisen, but the case for segregation of assets for thrift accounts is stronger if put upon other grounds. It may happen that a bank with both demand and time deposits may be subjected to a quiet run by the demand depositors, which eventually drains the bank of its best and most liquid assets, to the detriment of the holders of thrift accounts who were unaware of the run. Naturally the non-thrift time deposits would be drawn out in the same fashion as the demand deposits, within the limits of maturities and required notice. If the run became so pronounced as to cause the banker to require notice for the withdrawal of savings accounts, the damage would have already been done. Such notice requirement would complete the loss of confidence of the demand depositors and would result in the closing of the bank for the "protection of the depositors." This result is inevitable unless the amount of demand deposits is small in relation to that of time deposits. Further, if one considers that savings depositors are usually the ones most easily stampeded into runs, one is forced to the conclusion that protection of the thrift depositor against the withdrawals by demand depositors is not the only reason for segregation of assets. In view of the fact that sometimes the large holders of demand deposits remain with their bank in times of stress, in contrast to the savings depositor with his hoarding tendencies, it might be argued that the demand depositor needs protection against the uncertain actions of the thrift depositor. Despite the fact that a strong argument may be made in favor of segregation as a means for protecting the demand depositor against the holder of thrift accounts, the main emphasis should probably rest on the need for protection of the thrift de-

posits which represent the accumulations of funds for emergencies and for old age by individuals who for the most part have small incomes. Insofar as possible, they should be protected against losses of their savings and still be given as good an interest return as is compatible with security. Such a desirable result under our system of banking cannot be accomplished without segregation of assets. Commercial banks, whether we like it or not, are compelled to engage in many lending activities which are speculative in nature. From the very nature of things they cannot avoid risks in making loans. They are in the midst of a dynamic business world and are constantly being called upon to make decisions on problems whose outcome is uncertain. The existence of a considerable degree of risk is in a way less objectionable to the average commercial depositor than to the thrift depositor. The very hazard to which his deposits are subject becomes unimportant in view of the fact that the existence of such hazards is essential if he in turn is to be able to borrow readily in time of need. Such hazards, fortunately, can be minimized by careful bank management, adequate capital, and by a reduction of serious depressions in business. But the thrift depositor is entitled to be free from such hazards, not only because he does not directly benefit from them as the commercial depositor does, but also because he is much less able to assume them.

The most vital reason for desiring segregation of assets behind thrift deposits arises from the fact that only in this fashion can proper security be afforded. The very favorable experience of the mutual savings banks during the years of banking collapse (1921 to 1933) is ample evidence that such security can be had if proper regulations are set up. Perhaps there was some excuse in earlier times, when savings were scarce and the demands for capital to develop new areas were tremendous, for the failure to set up proper facilities to care for the needs of thrift depositors. Such an excuse is no longer valid. The fact that segregation of thrift accounts from commercial accounts is not

practiced by the Canadian and English banks is, of course, no evidence of its undesirability. Their high-grade management, coupled with the branch banking system, which possesses more inherent stability, undoubtedly gives the thrift depositor considerably more security than American banks without segregation are able to provide. The introduction of a system of insurance of bank deposits by the 1933 and 1935 banking acts obviously reduces the need for segregation among banks which enter the system. However, the fate of the insurance system cannot be considered settled as yet. If it should eventually be terminated or should fail to give adequate protection, the need for segregation would immediately arise once again.

CHAPTER V

THE GUARANTY OF BANK DEPOSITS

General problem. Depressions which result in numerous bank failures usually bring agitation for some form of guaranty of bank deposits to protect the depositor from loss. As early as 1829, the state of New York attempted to accomplish this through the Safety Fund System which was established to guarantee the payment of notes and deposit obligations of the banks of that state. After the panic of 1893, a movement was again started to guarantee deposits, but it failed to achieve any tangible results in the form of legislation. Modern experience with guaranty of deposits followed the panic of 1907. The year 1908 saw the inauguration of a compulsory system of bank deposit guaranty in the state of Oklahoma, followed by guaranty legislation in seven other states; thus eight states tried a system of guaranty in some form or other. The results of these experiments were such as to dampen the enthusiasm of people who had previously advocated the plan. In times of good business and up to the depression beginning in 1920, they worked well. However, bank failures became so numerous during and after this depression that in every case the burden became too great and the systems collapsed.

Standard by which guaranty of deposits must be judged. In discussing the question of guaranty of deposits, one must first ask what is to be attempted and what is to be the standard for measuring the probable results. Such a far-reaching matter as a guaranty of deposits on a nation-wide scale can be justified only upon the basis of public good.

What, then, is a proper standard for measuring the public good involved? Obviously it is not to be found merely in the fact that a guaranty system might shift the burden of losses from the backs of bank depositors to someone else. It may be contended that bank depositors as individuals must take their chances of loss along with other lenders and investors. To make a case for a guaranty system, it is necessary to show with reasonable certainty that the economic system would actually reap some net gain over and above the gain it would realize without such guaranty. This, in turn, involves several questions.

1. How may a guaranty system be expected to affect the quality of banking practice and the fundamental strength of the banking system?

2. Will it favorably or unfavorably affect the ability of the banks to serve their communities?

3. Is there sufficient reason, involving public policy, for taking such extraordinary measures to protect bank deposits when creditors in other businesses receive no such protection?

4. Will the direct burden involved in guaranteeing deposits be intolerable to those who will have to assume it?

Guaranty of deposits and quality of bank management. First, will a guaranty system encourage "bad banking?" Will the irresponsible and dishonest banker be more able than before to deceive the public, so that the whole system will degenerate? Will incompetence be increased? Bankers have often gone on record as opposing guaranty of deposits on this ground. It is argued that, with all deposits equally well protected, the public will no longer base its choice of banks on the security afforded by the conservatism of the management, but will patronize the banker who pays the higher interest rate. This in turn would result in competition which would be disastrous to sound banking. Cogent as this reason undoubtedly is, its validity is necessarily based upon the assumption that depositors: (1),

are able to choose their bankers intelligently, that they are able to distinguish between a sound and conservatively managed institution and one not so managed; and (2) choose their banking connections solely because of a fancied security of deposits and interest payments. As to the first assumption, there is little evidence that the average depositor is able to make an intelligent choice of banks. It is no secret that the imposing statement of assets and liabilities is quite as successfully used by the unscrupulous and unsound banker as by the better bankers, and that the public in general is entirely incapable of making any use of such statements in determining where to place its deposits. The depositors in the thousands of banks which suspended without reopening since 1921 are eloquent testimony of the helplessness of the average depositor. Moreover, the dangerous competition of banks offering higher interest on deposits has confronted the conservative banker for many years. Would not these considerations tend to support the contention that the depositor, even with no guaranty, is quite unable to distinguish between the sound and the unsound banks? The common clearing house agreements, limiting the interest paid on deposits, which existed before deposit insurance was started, are further evidence that such a danger exists even in the absence of a guaranty system. In general, it seems fair to conclude that, with a guaranty system, the small depositor will be no more inclined to patronize the unsound banker than before. The larger depositor is probably no more impressed by interest payments than he is by the opportunity to maintain banking connections with institutions which are in a position to give him adequate service, sound financial aid, and guidance. Here the sound banker of established reputation is quite as well off under a system of guaranty as without such a system. He can still reap the rewards of his experience and sound judgment.

To offset possible tendencies toward lax banking induced by a uniform system of guaranty of deposits, there must be

more careful and effective supervision of banking practices. Such improvements are needed in any event. Obviously more care should be used in the issue of charters in prosperous times to prevent "overbanking," and effective means are required for ridding the banking world of individuals who engage in shady and unsound practices. A guaranty system strengthens the hands of the supervising officials in managing difficult cases. Without it the officials are reluctant to take any strong measures against bankers violating the law and the rules of sound banking practice, for fear of unfavorable consequences to the credit standing of the remaining banks of the community. Under a system of guaranty this need not be an issue, and the supervising officials may with impunity order the institution closed and its affairs wound up or may compel the withdrawal of offending officials, with resultant savings both to the depositors and the stockholders. Finally, it should be remembered that without a guaranty system the main method which we have had for ridding the community of incompetent bankers is to let them fail. This method is still possible under a guaranty system. The unsound and incompetent banker can fail quite as effectually under a guaranty system as without it. Conversely, the rewards of the sound banker in the form of profits derived from long and successful banking practice will remain. It is fair to conclude that the objection that a guaranty system will ruin the banking system by enabling the weak, incompetent, or irresponsible banker to gain at the expense of the sound, conservative, and able banker is less important than it might appear at first consideration.

Effect of guaranty on functioning of banking system. The second question which should be raised is the probable effect of a system of guaranty of deposits on the functioning of the banking system. In answer to this, one need only draw upon the experience of the state attempts to guarantee deposits, where it was found that runs on banks were practically abolished. In view of the frantic efforts

of banks to maintain a position of liquidity in times of crisis and under the pressure of runs, and the consequent reluctance of some to make time loans of any kind even on good security, it seems probable that a guaranty of deposits will enable the banks to give better service to the business community.

Does public policy require some form of guaranty protection for deposits? The third question raised is this: Is there any real public advantage in a guaranty system which shifts the risk from the shoulders of the depositors to someone else? Is the shock to a community resulting from the loss of depositors' funds of sufficient importance to justify an attempt to cushion it through some form of insurance? The president of an important New York City bank is reported to have said in opposition to guaranty of deposits. "There is no more reason to guarantee banks that are not run well than there is to guarantee department stores or industrial concerns that are badly run." This remark is a bit misleading, for it implies that a guaranty of bank deposits constitutes a guaranty of the bank. Such an interpretation is inaccurate. There is no attempt to guarantee that the banking venture will turn out profitably for the owners. If the bank is not soundly operated, the stockholders stand to lose with a system of guaranty quite as readily as without. The real question is whether or not the community welfare is so intimately tied up with the continued functioning of its banking system and the safety of its bank deposits that it is desirable to lessen the shock by spreading the loss. Any person who has witnessed the paralysis which seizes a community that has suffered bank failures realizes that this is at least a reasonable question, not to be dismissed by sweeping generalities. The salutary effect on the economic life of the country as a whole from abolishing runs on banks and reducing the shock from bank failures suffered by particular communities can hardly be denied. Although different in its application, its immediate results are somewhat similar to those of fire insur-

ance, the essential advantage of which lies in the reduction in the shock by spreading the loss.

Financial burden of guaranty. The fourth question to be faced is a vital one. Will the burden of bank failures be so great as to bring down the good bankers with the bad? This, of course, assumes that the burden is to rest on the bankers themselves. Obviously the burden of bank failure must be borne by someone, regardless of whether or not there is a guaranty system, a point often overlooked. The experience of the eight states that tried a guaranty system was so unfortunate as to lead many to believe that guaranty of deposits on a sound and equitable basis is impossible. Without exception, these systems worked well in fair weather, but were unable to withstand the load of general depression. The burden placed upon the bankers who remained solvent became intolerable and resulted in the eventual abandonment of the attempt in all states. As a result of this unfortunate experience, it is often assumed that deposit guaranty of any sort is doomed to failure. The collapse of the guaranty systems tried in the eight states can be traced to two main causes: first, inadequate supervision of the system in several instances may be blamed for part of the difficulties; and second, individual states were unable to furnish adequate diversification of risk.

Experience with Guaranty System

The experience with deposit guaranty in the eight states which tried it is summarized in Table I.

The Economic Policy Commission of the American Bankers Association made a careful study of the experiments with deposit guaranty in the western states. Some of their conclusions are quoted here.¹

These lessons of experience appear to demonstrate conclusively that in practice the guaranty of deposits plan generally tended

¹ *The Guaranty of Bank Deposits*, 1933, quoted with the permission of the American Bankers Association.

GUARANTY OF BANK DEPOSITS

TABLE I

EXPERIENCE WITH STATE SYSTEMS OF DEPOSIT GUARANTY *

	<i>Begun Ended</i>		<i>Assess- ments Paid</i>	<i>Deficit at End</i>	<i>Failure Rate of Guaran- teed Banks</i>	<i>Years</i>	<i>Failure Rate of Na- tional Banks</i>
Oklahoma	1908	1923	\$3,700,000	\$7,500,000	35.6%	(1908-24)	7.6%
Nebraska	1909	1930	17,700,000	20,000,000	38.4	(1921-30)	19.6
Mississippi	1915	1930		5,000,000	16.0	(1920-30)	10.0
South Dakota	1916	1927		36,769,000	42.0	(1924-27)	33.5
North Dakota	1917	1929	2,000,000	14,000,000	50.0	(1919-29)	35.0
Kansas	1909	1929	2,685,000	7,175,000	5.9	(1922-24)	1.5
Texas	1910	1927					
Washington	1917	1929	825,000	1,400,000			

* Compiled from the report on *The Guaranty of Bank Deposits* by the Economic Policy Commission of the American Bankers Association

to induce an unsound expansion in the number of banks and the volume of bank deposits under its supposed protection. This was clearly connected with the indiscriminate popular confidence created toward the banks under the guaranty. Unneeded, undersized and unsound banks, as well as unqualified bank operators, were enabled to command public patronage because of the belief that the banks in the state system were guaranteed by the state and therefore the depositor could not lose.

The rate of bank failures was greater among guaranteed banks than among non-guaranteed banks doing business side by side with them. This produced a higher rate of loss than the guaranty funds, set up by assessments against member banks, were calculated to meet and resulted in the insolvency of the funds, their financial breakdown and large deficits in unpayable claims in the hands of disappointed depositors.

This inadequacy of the funds occurred even though the assessments on the member banks were oppressively high. Higher assessments, sufficient to sustain the funds, would have driven many banks out of business. In one case, where the method of assessment was such as to permit exactions from sound banks sufficient to meet the claims against the fund in full, the impairment of sound banks was so great as to cause serious public alarm and to force abandonment of the plan.

The apparently unsurmountable actuarial difficulty in the guaranty plan appears to be the impossibility of placing it on the basis of selected risks. For one thing, the causes leading to many bank failures arose from general and wholly unpredictable

economic conditions far broader than the field of banking experience itself. Again, either unrestrictive laws as to chartering new banks or lax administration of the laws admitted to the plan a large volume of banking of a character that created abnormally high volumes of claims upon it. Even where no great increase was allowed in the number of banks, and therefore a certain degree of numerical selection of risks prevailed, internal deterioration of banking under the influence of the plan tended to negative this selectivity. From such causes, therefore, weaker banking and higher mortality among the guaranteed banks destroyed the expected balance between the risks and the reserves created by the assessment.

As a matter of unbiased history, therefore, the guaranty of deposits plan proved fallacious and unworkable, whether from the point of view of banking practice, actuarial science as applied to the insurability of bank deposits, the effects on the human element within banking, the effects on the public attitude toward banks, the attitude of public bank supervisory officers in respect to their duties and administrative functions, or the fortifying of the banking structure to withstand adverse economic conditions.

These historical experiences show that the guaranty plan is inherently fallacious and based on erroneous premises and assumptions. It has proved to be one of those plausible, but deceptive, human plans that in actual application only serve to render worse the very evils they seek to cure.

The Present Deposit Insurance System

The first attempt to develop a nation-wide system of insurance of bank deposits was undertaken in connection with the Banking Act of 1933. Congress then amended the Federal Reserve Act by adding Section 12 B, which provided for the insurance of deposits of all Federal reserve members and qualifying nonmember banks. As originally enacted, the law provided a temporary plan of insurance which was to be in force from January 1, 1934, until July 1, 1934, at which time a permanent plan was to go into operation. The temporary plan was designed to bridge the gap until the permanent plan could be started.

Temporary plan. The temporary plan provided for the insurance of the deposits of all member banks licensed to

operate by the Secretary of the Treasury and the deposits of nonmember state banks whose solvency had been certified to the Federal Deposit Insurance Corporation by state supervisory authorities. Each insured bank was required to pay into a central fund an amount equal to $\frac{1}{4}$ of 1 per cent of deposits eligible for insurance, with an equal amount, in addition, subject to call. The maximum insurance under this temporary plan was \$2,500 for any individual depositor. Under this temporary plan all member banks and most nonmember banks able to qualify were insured.

Original permanent plan. The permanent insurance, which was to have gone into effect on July 1, 1934, would have changed the basis for deposit insurance from a flat \$2,500 maximum fully covered, as under the temporary plan, to the following sliding-scale formula:

- 100% coverage on all deposits not exceeding \$10,000
- 75% coverage on excess of deposits above \$10,000 up to \$50,000
- 50% coverage on any excess of deposits above \$50,000

Moreover, each insured bank was to subscribe to stock in the Federal Deposit Insurance Corporation to an amount equal to $\frac{1}{2}$ of 1 per cent of its total deposit liabilities. One half of this subscription was to be paid in full, and the other half was to be subject to call. Whenever the funds of the Federal Deposit Insurance Corporation became depleted, the insured banks were to be assessed at the rate of $\frac{1}{4}$ of 1 per cent of their total deposits.

The opposition to the permanent plan became so strong that its inauguration was postponed until a more satisfactory law could be formulated. The objections were: (1) it unnecessarily increased the volume of deposits covered by insurance (96.5 per cent of the total number of accounts in member banks were entirely covered by the \$2,500 limit of the temporary plan); (2) the assessments on the basis of total deposits was unfair to the larger banks, which had mainly large accounts only partially insured; and (3) the banks were subject to unlimited assessments to replenish the fund. A new law approved August 23, 1935, modified

the old permanent plan to meet some of the criticisms. During the intervening period (July 1, 1934 to August 23, 1935) the temporary insurance plan continued to operate in the same manner as during the first six months of its existence, except that the insurance coverage was raised from \$2,500 to \$5,000.

Present deposit insurance. The new permanent plan, effective August 23, 1935, provided for the same basic organization as the original plan. The Federal Deposit Insurance Corporation is retained, with somewhat increased authority. Its funds are derived from three sources: (1) the United States Treasury subscribed to \$150,000,000 in capital stock; (2) each Federal reserve bank was required to subscribe to shares of stock equal to one half of its surplus account as of January 1, 1934 (this amounted to \$139,299,556.99), and (3) each insured bank contributes annually $\frac{1}{12}$ of 1 per cent of its average deposits. The assessment is to be paid semiannually and is to be computed by multiplying the rate ($\frac{1}{24}$ of 1 per cent semiannually) by the assessment base, which is the average daily difference between total deposits and total uncollected items credited subject to final payment. For this purpose deposits payable only at an office outside the United States or any of its dependencies are excluded. At the option of the bank, any deposits payable only at a branch located in one of the dependencies of the United States may be excluded from the insurance provisions and from the assessment base.

The Federal Deposit Insurance Corporation is under the management of a board of directors consisting of the Comptroller of the Currency and two others appointed by the President. The corporation is empowered to appoint examiners with power to examine all insured nonmember state banks, any national banks with the written consent of the Comptroller, and any state member bank with written consent of the Board of Governors of the Federal Reserve System. The corporation shall be appointed receiver of all failed national banks and shall *accept* appointment as re-

ceiver of failed insured state banks when such receivership is tendered by state supervisory authorities under the state law.

As soon as possible after failure of an insured bank, the corporation shall make available to each depositor the amount of the insured deposits, either by transferring it to another insured bank in the same community, by depositing it in a new national bank with a temporary organization if public interest so requires, or by direct payment to depositors. If a new bank is organized by the corporation, it may accept deposits, to be held in cash or the equivalent, or to be invested in government securities, pending sale of stock and completion of organization or the sale of its assets and transfer of its liabilities to another insured bank.

The corporation may issue obligations, which are eligible for purchase by the Secretary of the Treasury at his discretion, in an amount not more than three times the amount received in the sale of its capital stock and the assessments on insured banks for the year 1936. The corporation is required to prohibit the payment of interest on demand deposits and to limit the interest paid on time and savings deposits of insured nonmember banks. It is also required to prohibit the payment of time deposits of such banks before maturity except under regulations of the same sort as are set up by the Board of Governors for Federal reserve members.

Any nonmember insured bank may terminate its insured status upon ninety days' notice. Member banks are required to be insured. Whenever an insured bank is guilty of continued unsound practices or violation of law, the Federal Deposit Insurance Corporation shall notify the supervisory authorities concerned regarding such practices or violations. If conditions are not improved within one hundred twenty days (or less, as determined by the authorities concerned), the corporation may give the bank at least thirty days' notice of intent to terminate the insured status of the bank and set a time for hearing of the case. If the corpo-

ration finds the charges substantiated, it may order the termination of the bank's insured status, publish notice of the same, and require the bank to give notice to all depositors to that effect. After the termination of insured status, existing deposits shall continue to be insured for a period of two years, and the bank is liable for the regular insurance assessments. New deposits or additions to old deposits, however, are not insured. Since national banks and Federal reserve members cannot be uninsured, national banks under the circumstances are put into the hands of a receiver, and state member banks must give up membership in the Federal Reserve System.

As the funds of the corporation accumulate, they may be invested in obligations of the United States or in obligations guaranteed by the United States, or temporarily deposited with the Treasurer of the United States or in any Federal reserve bank.

The corporation is subrogated to the rights of the insured depositors of the closed banks to the extent that it is entitled to receive the same dividends from the proceeds of the assets and recoveries on account of stockholders' liability as would have been payable to the depositor on a claim for the insured deposit. The depositor retains his claim for any uninsured portion of his deposit. The corporation, therefore, is in the position only of a general rather than a preferred creditor.

Not only is the corporation to act as receiver of all failed national banks and, where permitted, of failed insured state banks but it may also purchase or make loans upon the assets of failed insured banks to facilitate the liquidation process.

Insurance of mutual savings banks. Owing to the dissatisfaction of mutual savings banks with the original plan to insure their deposits on the same basis as other banks, the present law provides for the maintenance of a special insurance fund for mutuals with lower rates of assessment than for other banks. This fund is kept separate, and that

portion of the regular insurance fund which is contributed by assessment on other banks is not liable for losses from failure of mutual savings banks. These provisions for a separate fund for mutuals appeared first on June 16, 1934, as an amendment to the deposit insurance features of the 1933 law. One of the immediate causes for its enactment lay in the fact that early in 1934 the state of New York passed a law permitting 75 or more mutual savings banks with not less than 50 per cent of the savings bank deposits of the state to set up a mutual fund for the insurance of deposits. As a result, 135 of the 138 mutual savings banks of the state joined the mutual deposit system.² Likewise, Massachusetts had a similar arrangement. During the year 1934, 146 mutual savings banks carrying over \$5,300,000,000 in deposits withdrew from the Federal insurance system. At the end of the year, 68 mutual savings banks with \$1,045,000,000 in deposits remained in the Federal insurance system as compared with 506 mutuals having \$8,690,000,000 in deposits uninsured in the Federal fund. The special funds for mutuals of the states of New York and Massachusetts furnish not only deposit insurance service but rediscount facilities for their members as well. In Massachusetts, the Mutual Savings Central Fund was established in 1932 to provide discount facilities, and its powers were extended in February, 1934, to include full insurance coverage for deposits. Membership is compulsory. Table II shows the insured position of mutual savings banks at the end of 1934 (see page 58).

Membership of insured banks in Federal Reserve System. As first enacted, the deposit insurance law provided that nonmember state banks were required to join the Federal Reserve System before July 1, 1936, as a prerequisite to retaining insured status. The amendment of 1934 postponed the requirement until July 1, 1937. The law now

² Benson, Philip A., "Mutual Savings Insurance Funds," *American Bankers Association Journal*, August, 1934.

TABLE II

MUTUAL SAVINGS BANKS, DECEMBER 31, 1934*

	<i>Number of Banks</i>	<i>Total Deposits (In Millions of Dollars)</i>
Insured by the Fed. Deposit Insurance Corp	68	1,045
Members of the Savings Bank Trust Co. of New York	135	4,648
Members of the Mutual Savings Central Fund, Inc., of Mass.	193	2,052
All other mutual savings banks	178	1,900
Total	574	9,735

* *Annual Report of the Federal Deposit Insurance Corporation, 1934, p. 64*

stands, as amended in 1935, with the requirement that non-member state banks with average deposits of \$1,000,000 or more for any calendar year beginning with 1941 must become members by July 1 of the following year to remain as insured banks. Regardless of their size, savings banks, Morris Plan banks, and state trust companies doing no commercial banking business are not required to join the Federal Reserve System in order to be insured. Thus the danger that small banks would prefer to abandon the FDIC rather than join the Federal Reserve System is somewhat reduced.

Type of deposits insured. An "insured deposit" under the present law is defined as "the net amount due to any deposit or deposits in an insured bank (after deducting offsets) less any part thereof which is in excess of \$5,000." For the purpose of determining the amount owed any depositor, all deposits in the bank for his benefit, either in his own name or in the name of others, are combined.

Trust funds held in cash, awaiting investment or disposal, are considered separately from other deposits regardless of the beneficiary, and each separate trust fund is insured up to \$5,000.

Probable adequacy of insurance fund. The present insurance fund is to be maintained solely out of the accumulations resulting from an assessment of $\frac{1}{2}$ of 1 per cent of

the total deposits of the insured banks. Thus the criticism that in times of heavy failures sound banks will be dragged down by the burden of failures is avoided, since no provision is made for extra assessments. To care for the contingency of concentrated failures which might exhaust the fund, the corporation is granted the borrowing power described above. Within the limits of this borrowing power, the Federal treasury is behind the fund, since it may purchase the corporation's obligations.

A question naturally arises as to the adequacy of the annual assessments to meet the probable future costs of deposit insurance. It has been estimated that if a collection of an annual premium or assessment of $\frac{1}{10}$ of 1 per cent against national banks had been made from 1863 down to the beginning of 1933, these receipts, plus the unused balances accumulating at 3 per cent interest, would have covered all of the losses from failed national banks, and there would have been a surplus of \$154,000,000 at the beginning of 1933.³ The *Annual Report of the Federal Deposit Insurance Corporation* for 1934 gives an estimate of the annual losses for the period 1865 to 1934 per \$100 of deposits in active banks as follows:⁴

	Total Losses	Losses on Deposits Insurable under the \$5,000 Limitation
National banks	\$227	\$149
State banks	412	328
All banks	324	244

If these figures are correct, one may seriously question the adequacy of an assessment of $\frac{1}{12}$ of 1 per cent to insure the deposits of all banks unless very definite reforms can be instituted to improve banking practices and reduce failure losses.

Attempts of FDIC to strengthen insured banks. The ultimate success of deposit insurance rests upon the sound-

³ Taggart, J. H., and Jennings, L. D., "Insurance of Bank Deposits," *Journal of Political Economy*, August, 1934, p. 508.

⁴ P. 90.

ness of the insured banks. That excessive failures will inevitably result in the undoing of the whole project is amply demonstrated by the experiences of the individual states which tried deposit insurance. Care must be taken that bankers shall not rely upon the insurance rather than upon sound management methods to command public confidence and attract business. Such a loosely knit banking structure as ours can hardly be relied upon to follow conservative and sound practices without fairly rigorous supervision. Under deposit insurance this supervision has been considerably strengthened.

The relatively poor showing of state banks belonging to the Federal Reserve System during the troubled times between 1929 and 1933 indicated clearly that membership in the Federal Reserve System alone was no guaranty of good management. Although the Board of Governors of the Federal Reserve System (called the Federal Reserve Board before 1936) had authority to examine member banks, the exercise of this right involved duplication of the efforts of the Comptroller of the Currency (who has supervision over national banks) or the state bank examiners. Consequently the Federal reserve authorities normally accepted the report of the state or national bank examiners without any independent examination of their own. Since 1933, however, the Federal reserve authorities have adopted a policy of examining all state chartered member banks at least once each year. The Federal Deposit Insurance Corporation has specific power to examine insured nonmember banks; to examine national banks with the consent of the Comptroller of the Currency; and to scrutinize state member banks with the consent of the Board of Governors. It has, therefore, adopted the practice of making annual examinations of each nonmember insured bank, with additional examinations when conditions seem to warrant them. Further, it has authority to require all insured member banks to submit reports, and it has access to any reports to and results of examinations by the Comptroller and the Federal reserve.

banks. The Federal Deposit Insurance Corporation is therefore in a good position to detect and act upon poor management policies of the nonmember state banks. Its control over national and state member banks is still rather ill-defined and has led to proposals that power of examination and supervision of all insured banks, member state and national banks, as well as nonmember banks, should be concentrated in the hands of the Federal Deposit Insurance Corporation.

As a means of preventing the admission of unsound banks to insured status, the Federal Deposit Insurance Corporation examines all applicants. The chartering of new banks has presented something of a problem. It has been generally agreed that a serious fault in the American banking system is to be found in the chartering of banks in locations already adequately supplied with banking facilities, a practice leading to a tendency toward cutthroat competition and unsound banking practices. In an attempt to forestall a repetition of excess chartering, the Federal Deposit Insurance Corporation has endeavored to persuade state authorities not to grant new charters until it has examined each local situation and has agreed to admit a new bank to the deposit insurance system.⁵

Since many banks were admitted to membership in the insurance system with little if any real "sound capital," there has been a definite effort to increase the stockholders' equity in insured banks. The rule has been laid down that the "net sound capital" of all insured banks should equal at least 10 per cent of a bank's deposits.⁶ Finally, as a means of reducing the number of weak banks unable to meet necessary standards, the corporation may exercise its right to make loans secured by the assets of insured banks in order: (1) to reduce or avert an impending loss; and (2) to facilitate a merger or consolidation of the borrowing in-

⁵ *New York Times*, February 2, 1937.

⁶ *Annual Report of the Federal Deposit Insurance Corporation*, 1935, p. 28.

sured bank with another insured bank, or the sale of its assets and assumption of its liabilities by another insured bank. This enables the corporation to take inevitable losses during times of prosperity and also increases the stability of the banking system by eliminating weak banks doomed to eventual failure

CHAPTER VI

COLLECTION OF CHECKS

If all deposits were payable only to the depositor himself, interbank relationships would be simple. Instead, demand deposits are paid upon written negotiable orders or checks. It is the custom in this country to make payments by drawing these orders or checks payable to the person to receive the funds and to deliver these checks in lieu of cash. The receiver of a check may be a depositor in the bank on which it is drawn, in which case only a bookkeeping entry is required to complete the payment. The deposit of the drawer of the check is reduced and that of the payee is increased by the amount of the check. A large proportion of checks drawn, however, are transferred to persons who are not customers of the drawee bank. Some go to individuals with no banking connections, who present the checks at the paying teller's window for payment, or who transfer the checks to local merchants, who in turn must present the checks for payment. Thus many checks drawn against a bank's demand deposits fall into the hands of depositors of other banks. As a service to depositors, a bank normally undertakes to collect checks drawn upon other banks. This service may be free or a charge may be made. In any event the bank credits its depositors' accounts with the amount of checks deposited and collects the checks from the drawee banks.

This check collection performed by banks for their customers has two important consequences. First, it makes

possible the widespread use of checks as a means of payment. Perhaps 90 per cent or more of all the money payments in the United States are made by checks against demand deposits. Without this development, the usefulness of demand deposit banks would be greatly reduced. A second consequence of check collection is that it necessitates the existence of an elaborate set of devices whose main function is to facilitate the collection process. These devices fall into two general classes: (1) the local clearing houses for collecting checks on local banks, and (2) the collection system for handling the checks drawn on out-of-town banks. Each of these will be examined in turn.

The Clearing House

The use of the clearing house for exchanging checks arose out of the obvious convenience of such a practice. Without a special meeting place where the representatives of the banks could assemble, it would have been necessary for messengers from each bank to make separate calls on other banks for the purpose of presenting and collecting checks received from depositors and making settlements therefor. This troublesome procedure is avoided by the use of the clearing house.

The responsibility for smooth operation of the clearing function cannot be left to mere chance. Hence banks wishing to clear checks through the clearing house form an organization called a *clearing house association*. Through this association rules and regulations are set up for the control of the clearing functions. A uniform procedure is worked out so that the clearing of checks goes on smoothly. Messengers must arrive with checks at a stated time. The checks for clearing must be properly sorted and recorded. Settlements must be made in certain approved ways. Moreover, the banks find the clearing house association a convenient device for introducing coöperative action in matters other than the mere clearing of checks. For example, competitive practices are frequently regulated and

standardized through the association. It follows, therefore, that some form of administrative control is necessary. This control is normally centered in the clearing house committee, made up of influential bankers elected by the representatives of the members of the association. This committee formulates the regulations governing the various operations of the clearing house, while the responsibility for the execution of these regulations is usually vested in a manager. The voluntary association rather than the corporate form of organization is most favored. It gives greater elasticity of function as well as more effective control over the members than would be afforded by the more rigid corporate form.

The clearing mechanism. The clearing operation is itself simple in principle. Before being sent to the clearing house, each check must be inspected to make certain that it is properly indorsed by the payee and that it appears to be regular in every way. Further, it is indorsed with a rubber stamp bearing the date, name, clearing house number of the clearing bank, and some notation to the effect that payment is received through the clearing house. The checks are then sorted according to the bank on which they are drawn, and the amounts totaled and recorded on a slip which is attached to each package of checks.

At the time appointed for clearing, the messengers from each bank go to the clearing house and exchange the packages of checks so that each messenger comes into possession of the checks drawn on his bank. On a specially prepared statement blank containing the names of the other clearing banks, the messenger records the amount of the checks delivered to and received from each of the other banks and computes the total of checks brought to and received from the clearing house. If the amount brought to the clearing house exceeds the amount received, the bank has a favorable balance at the clearing house, and the net excess will be paid to it. On the other hand, if the checks received from the clearing house exceed those brought, the bank is

a net debtor and must pay the difference to the clearing house.

In some cities the clearing of checks is formally carried out more than once a day. Further, large banks frequently are able to expedite their bookkeeping by informally exchanging checks drawn on each other at more frequent intervals. In such a case the drawee bank gives the presenting bank a receipt for the total amount of checks received and the receipt is put through the clearing house at the regular time in the same fashion as a check. In larger cities small banks not wishing to assume the responsibilities of membership or unable to qualify arrange to have their checks cleared through a member bank.

Methods of settlement. One principle of settlement prevails. The debtor banks pay only the net amount of their debts to the clearing house. The creditor banks receive in turn only the net amount due them. Thus the settlement is made with a minimum amount of trouble.

To accomplish this the clearing house manager acts as an intermediary. He may draw checks against the debtor banks in favor of the creditor banks. These checks are presented over the counter of the debtor bank and in turn may be paid in a number of ways. In the past, clearing houses made settlement by the use of clearing house certificates. In such a case each member of the clearing house deposited with the manager a quantity of lawful money, usually gold or gold certificates, and received in return clearing house certificates in convenient denominations and payable only to a member of the clearing house. These certificates made it possible to make settlements conveniently and without risk of loss. More commonly, settlements today are made with drafts drawn on city correspondents or on the Federal reserve bank of the district.

Other functions of the clearing house. Bankers find that collective action is desirable for three distinct reasons: (1) excessive competition is likely to lead to practices which impair a banker's profits; (2) bank failures must be pre-

vented as far as possible if banks are to be spared the consequences of loss of public confidence; and (3) when difficulties do arise, in spite of whatever protective measures are taken, mutual aid is needed to withstand the shock.

The clearing house association forms a convenient means for accomplishing the needed collective action. To prevent undesirable competition, the clearing house association lays down for its members rules which may cover a variety of practices. It may, for example, fix the maximum rate of interest members may pay on deposits, the uniform charge for collecting out-of-town checks, or the required minimum balances and service charges.) Depositors frequently resent such collective action taken by banks on the ground that it is monopolistic in its effects. A fair appraisal of the results, however, must take cognizance of the very positive public benefits. Cutthroat competition among banks is almost certain to bring trouble. The bank which pays excessive interest rates or furnishes too many free services is a source of danger to the whole business community. The search for profits to offset the abnormal cost of such competition ultimately leads to the making of speculative loans and investments, with disastrous results to both the bank and the public alike.

(The second general reason for collective action through the clearing house is found in the necessity for preventing failures among banks.) Clearing house associations, therefore, often require regular reports of the condition of member banks. In some cases the clearing house goes so far as to establish a system of examination for all members. This practice began in Chicago in 1906 as a consequence of the failure of three banks controlled by John Walsh, which had been badly mismanaged. The Chicago Clearing House Association had been warned by the state and national bank supervisors that the banks were to be closed immediately. To allow these banks to fail outright would have been a dangerous blow to the local credit situation, which was already overextended. The members of the clear-

ing house, therefore, agreed to guarantee the deposits of the Walsh banks and to take them over for liquidation. This was a costly undertaking, for at one time as much as \$7,000,000 was advanced by the banks, although the ultimate loss after fifteen years of liquidation was reduced to about half that amount. Somewhat saddened by the experience in offsetting the results of the Walsh failures, the members of the Chicago Clearing House determined to prevent, as far as possible, recurrence of any similar episodes. An expert examiner, with several assistants, was employed and given authority to examine all the clearing banks. For many years, in fact up to the difficulties of 1930 to 1933, it was the boast of the Chicago Clearing House Association that no depositor had lost in the failure of any banks which were clearing house members. True, some few member banks had failed, but their obligations had been assumed and their assets liquidated without loss either to depositors or to the clearing house banks.

The advantages of a competent form of clearing house examination are several. First, the clearing house examiner has a more intimate knowledge of the affairs of borrowers and the whole banking system of the city than have either the state or national examiners, who get only a partial view of the situation. Further, the authority of clearing house examiners is more effective than that of state and national examiners. The latter necessarily must confine their criticisms largely to violations of banking law, since it is only such violations which are within their power to correct. Moreover, before 1933 examiners had no weapon for compelling compliance, save the threat of closing up the bank altogether. The clearing house examiners' criticisms, however, may be laid before the clearing house committee and be made the basis for expulsion from the clearing house association. To be denied clearing privileges or to be expelled from membership is a serious matter, and such a threat is likely to bring the erring banker into line.

Another regulatory activity of clearing house associations has to do with the setting up of banking standards such as

minimum reserve requirements, capital requirements, limitations on real estate loans, and investment of capital in fixed assets. Such rules may and do exist in the absence of a system of examination.

In spite of any precautions that may be taken, conditions may arise requiring more than mere prevention. Banks may become involved in spite of careful supervision and endanger the whole bank structure. Hence, whether or not clearing house examinations are used, it is sometimes necessary that local banks take steps to prevent loss by depositors. At such times clearing house associations may collectively guarantee the deposits of the failing bank and employ a liquidating agent to minimize the loss to themselves by avoiding costly receiverships. Or, they may "sell" the business of failing banks to some member of the association which undertakes to pay a fixed sum for the goodwill and probable value of the deposits. This bank then takes over the liabilities under a guaranty from the association and acts as liquidating agent.

Before the Federal reserve banks were created, with power to assist banks by lending them cash, the clearing house associations sometimes found it desirable to assist members that were in need by permitting them to meet their clearing house balances with clearing house loan certificates. These interest-bearing certificates were secured by the deposit of approved securities with the clearing house committee by the bank for whose benefit they were issued and were the obligation of the association as well as of the individual bank resorting to their use. By means of such certificates banks were able to carry on the local clearing of checks in spite of panic conditions which would otherwise have depleted some banks' cash to such an extent as to impair their legally required reserves.

Collection of Out-of-Town Checks

Two methods are available for presenting and collecting checks drawn on out-of-town banks. The first and the one most commonly used is that provided by the Federal re-

serve banks; the second is the resort to correspondent banks in other cities. We shall examine first the Federal reserve collection system.

Federal Reserve Collection System. The Federal Reserve Board, under the authority of the Federal Reserve Act, arranges to have each Federal reserve bank collect checks for such of its member banks as desire to avail themselves of its privileges and for such nonmember state banks and trust companies as may maintain adequate balances with the reserve banks.¹ Such nonmember state banks and trust companies are called nonmember clearing banks. Only checks drawn on "par banks" (banks which agree to remit the full face value of all checks presented through the mail) can be collected through the Federal reserve banks.

The system of check collection begins with the bank that has received out-of-town checks from its customers. Such checks must be prepared for collection in somewhat the same manner as local checks intended for the clearing house. They must be inspected for the indorsement of the payee and for any evidence of irregularity. They must then be stamped with the bank's indorsement. This is in the form of a special indorsement calling for payment to "any bank or banker," thus minimizing the danger of loss in case the checks should be stolen.

This work of preparing the checks for collection is done by the "transit department" in the larger, departmentalized banks. Proper record must be made of each check for the banks own use, and an identifying list is prepared to accompany the checks when they are sent in for collection.

If the collecting bank is a member, or a nonmember clearing bank, the checks are sent next to the Federal reserve bank, where the sending bank receives deferred credit. The reserve bank in turn indorses the checks and starts the process of collecting them from the drawee banks. Four possibilities arise at this time:

¹ Federal Reserve Board, *Regulation J*, Series of 1930, p. 1.

1. If the checks are drawn on banks in the city in which the reserve bank itself is located, they will be presented directly to the drawee bank or through the clearing house of which the reserve bank will be a member.

2. If the checks are drawn on member or nonmember clearing banks in other towns or cities of this district, the reserve bank will mail the checks directly to the drawee bank and request a remittance. After the drawee bank has had an opportunity to inspect the checks for genuineness, it will remit the amount to the reserve bank. In doing so it has a choice of: (a) drawing a draft on its reserve account with the reserve bank; (b) sending a draft on other banks located in the Federal reserve city; (c) shipping currency at the expense of the reserve bank; or (d) making any other form of payment acceptable to the collecting reserve bank. If a remittance is not promptly made, the amount will be deducted from the member's reserve account in any event; promptness in remitting is thus desirable.

3. If the checks are drawn on nonmember banks outside the Federal reserve city, the reserve bank may send them directly to the nonmember banks and request a remittance, or present them through a nearby member bank, which collects and remits.

4. If the checks are drawn on a bank in another Federal reserve district the collecting reserve bank sends the check to the reserve bank of the other district. The check then proceeds through the ordinary collection channels of that district, and settlement is made between the reserve banks through the Interdistrict Settlement Fund, which will be described later.

As we observed at the beginning, the original bank sending checks for collection to its Federal reserve bank receives deferred credit only. After collection has been completed by the reserve bank, the proceeds of the checks are credited to the member bank's reserve account. In order that member banks may be able to know the state of their legal re-

HEAD OFFICE FEDERAL RESERVE BANK OF CHICAGO TIME SCHEDULE

(Effective September 2, 1930)

CHECKS ON FEDERAL RESERVE BANK OF CHICAGO. OFFICERS' CHECKS OF OTHER FEDERAL RESERVE BANKS, FEDERAL RESERVE EX-CHANGE DRAFTS, and FEDERAL RESERVE TRANSFER DRAFTS will be received for **IMMEDIATE CREDIT** until 2 p. m. (Saturday 12 noon) when listed in a separate deposit which does not include other items.

CHECKS DRAWN ON CHICAGO BANKS and UNITED STATES POSTAL MONEY ORDERS PAYABLE AT CHICAGO will be received for **IMMEDIATE CREDIT** until 9 30 a. m. (Saturday 9 a. m.)

GOVERNMENT WARRANTS AND CHECKS DRAWN ON THE TREASURER OF THE UNITED STATES will be received for **IMMEDIATE CREDIT** until 11 a. m. when listed in a separate deposit which does not include other items. After said hour special deposits consisting only of items \$500 and over will be received until 12 noon.

CHECKS DRAWN ON OUT-OF-TOWN BANKS will be received for **DEFERRED CREDIT**, in accordance with the schedule below, until 12 noon (Saturday 11 a. m.) After said hours special deposits consisting only of checks \$500 and over will be received until 2 p. m. (Saturday 12 noon).

States	Cities	Number of Days Deferred		States	Cities	Number of Days Deferred	
		Calendar Days	Business Days			Calendar Days	Business Days
ALABAMA	Birmingham	2	4	NEBRASKA	Omaha	2	3
ARIZONA			5	NEVADA	New Orleans		6
ARKANSAS	Little Rock	2	5	NEW HAMPSHIRE			4
CALIFORNIA	Los Angeles	3	6	NEW JERSEY			4
	San Francisco	3	6	NEW MEXICO			6
COLORADO	Denver	2	5	NEW YORK	Buffalo	2	4
			5		New York	2	4
CONNECTICUT			4	NORTH CAROLINA	Charlotte	2	4
DELAWARE			4				4
DISTRICT OF COLUMBIA			4	NORTH DAKOTA		2	5
FLORIDA	Jacksonville	3	4	OHIO	Cincinnati	1	1
GEORGIA	Atlanta	2	4		Cleveland	1	
IDAHO			6	OKLAHOMA	Oklahoma City	2	4
ILLINOIS	Chicago	Immediate	2	OREGON	Portland	3	6
INDIANA			2	PENNSYLVANIA	Philadelphia	2	4
IOWA			2		Pittsburgh	2	
KANSAS	Kansas City	1	3	RHODE ISLAND			4
KENTUCKY	Louisville	1	3	SOUTH CAROLINA			1
LOUISIANA	New Orleans	2	5	SOUTH DAKOTA			5
MAINE			4	TENNESSEE	Memphis	2	
MARYLAND	Baltimore	2	4		Nashville	2	6
MASSACHUSETTS	Boston	2	4	TEXAS	Dallas	2	
MICHIGAN	Detroit	1	2		El Paso	3	
MINNESOTA	Minneapolis	1	3		Houston	3	
MISSISSIPPI	St. Paul	1	5		San Antonio	3	6
MISSOURI	Kansas City	1	3	UTAH	Salt Lake City	3	4
	St. Louis	1	5				4
MONTANA	Helena	3	5	VIRGINIA	Richmond	2	6
			5	WASHINGTON	Seattle	3	
			5		Spokane	3	
			5	WEST VIRGINIA			4
			5	WISCONSIN			2
			5	WYOMING			5

Checks drawn on banks not located in a Federal reserve city but bearing upon their face a notation that they are payable at or receivable for immediate availability in a Federal reserve city will be accepted on the same basis as checks drawn on banks located in that city.

COLLECTION OF CHECKS

serves at any given time, deferred credit is converted to full reserve credit after the expiration of the time not required to complete the collection process. The schedule needed to collect checks on different cities is carefully computed, an availability time schedule is set up, and proper copies are furnished to all member and nonmember clearing banks. The schedule prepared by the Federal Reserve Bank of Chicago is shown on page 72.

Member banks are not required to utilize the collection facilities of their reserve banks. They may and often send out-of-town checks to their city correspondents, who in turn send them to the Federal reserve bank for collection or collect directly from the drawee bank.

Use of Interdistrict Settlement Fund.* Checks collected in other districts are forwarded by the reserve bank which first receives them to the reserve bank of the district in which the checks are payable. This bank then presents the checks in the usual manner to the banks on which they are drawn, receives back remittance therefor, and in turn remits the collected funds to the first reserve bank in which the checks were received. This remittance between reserve banks is accomplished by daily telegraphic transfer communication from each reserve bank with the Board of Governors of the Federal Reserve System at Washington, which holds the Interdistrict Settlement Fund. Each Federal reserve bank has book credit against the fund for its share. At the end of each business day, each reserve bank reports to the Board of Governors the funds collected for each other reserve bank. The board thereupon computes the net changes in each reserve bank's claims against the Interdistrict Settlement Fund and notifies the several banks the following morning of the size of their shares of the fund. At the end of 1935 the fund amounted to \$3,000,000. During the year 1935, \$91,026,000,000 of checks and similar items were cleared through the fund, an

* Formerly called the Gold Settlement Fund.

addition, \$644,000,000 Federal reserve notes were cleared and \$1,472,000,000 in inter-reserve bank transfers were made.³

In some instances a saving of time can be accomplished by the introduction of short cuts in the routing of checks for collection. Intradistrict checks may be cleared through Federal reserve bank branches. Also, under special arrangements with the reserve bank, one member may send checks drawn on another member directly to the drawee bank and notify the reserve bank, which credits the collecting bank's reserve account upon receipt of remittance from the drawee bank. Interdistrict collection time may also be reduced by special agreements which authorize banks to route checks directly to the reserve bank of another district for the credit of the reserve bank of the sending bank.

Collection of checks without use of Federal reserve bank facilities. Although the Federal reserve banks furnish excellent facilities for the collection of checks for member and nonmember clearing banks, a substantial number of checks are collected without the use of the reserve banks. As we observed before, member banks frequently prefer, for one reason or another, to collect through city correspondents rather than through the reserve bank. For example, a member bank in Lafayette, Indiana, might wish to send its checks drawn on Indianapolis or the surrounding area to its Indianapolis correspondent, which would be in a position to make collection through the Indianapolis clearing house and grant immediate credit, whereas if they were sent to the Federal Reserve Bank of Chicago for collection, the checks would not be added to the reserve credit until two days after receipt of the checks by the Chicago bank. Thus, regardless of the use which the Lafayette bank wished to make of its funds, they would become available two days sooner by collecting through Indianapolis. Frequently member banks find it more con-

³ *Annual Report of the Federal Reserve Board, 1935, p. 99.*

venient to collect checks drawn on banks located near the reserve bank through correspondents in the reserve city. Since such correspondents may grant immediate credit, it might appear that the member bank could shift the burden of carrying "deferred credit" at the reserve bank on uncollected checks from itself to its city correspondent. That such a result would arise more than occasionally is unlikely, however, because the city correspondent carefully watches the size of balances carried with it and would probably not permit the country bank to draw against its "float" of uncollected checks. The real advantage of using a city correspondent as a collection agency in such a case might appear to be merely the convenience of accumulating balances with the city correspondent by sending checks to it for collection instead of collecting through the reserve bank and transferring the funds subsequently to the correspondent. It must be remembered that member banks still find it necessary to maintain balances with city correspondents in spite of the operations of the Federal reserve system. City correspondents are important links in the process of making loans on the call loan market and in purchasing commercial paper, bankers' acceptances, and bonds. Further, they are useful in furnishing customers with drafts on other cities, which are still frequently needed in spite of the increased acceptability of ordinary checks. Likewise, any connection which the smaller banks have with the foreign exchange market is through their city correspondents. Finally, country banks call upon their city correspondent banks for miscellaneous types of services not available from the reserve bank, including the furnishing of credit information desired by both the bank itself and its customers.*

Collection of checks by nonmember banks. The nonmember bank, unless qualified as a clearing nonmember, has no direct access to the clearing facilities of the reserve banks. It does have indirect access, however, through its member bank correspondents, which cheerfully undertake the task of collection in return for the favor of the nonmember's deposit.

Only one form of check is denied access to the reserve bank collection system—namely, checks on nonmember banks which refuse to remit at par for checks presented through the mails. Checks drawn on these banks must be collected through the correspondent bank system. In December, 1935, there were 6,387 member banks (all on the par list, of course), 6,266 nonmember banks on the par list, and 2,694 nonmember banks not on the par list.

The nonpar banks were distributed as to districts at the end of 1935 in the following manner:

Boston	0
New York	0
Philadelphia	0
Cleveland	2
Richmond	319
Atlanta	666
Chicago	226
St. Louis	387
Minneapolis	709
Kansas City	178
Dallas	174
San Francisco	33

It is evident that the nonpar banks are mainly located in the agricultural areas. The continued importance, in point of numbers, of the nonpar banks makes it desirable to examine briefly the practice of refusing to remit at par.

The exchange charge. A bank's contract with its depositor is to pay cash on demand. Presumably the bank carries a sufficient cash reserve to permit it to meet all probable demands of depositors. When the depositor inconsiderately sends a check to another city where it is deposited in a bank which mails the check back for payment, the

local drawee bank is confronted with a different sort of problem from that arising from a simple presentment of a check at the window. The drawee bank must "remit" the amount to the bank presenting the check. This may be accomplished by actually shipping currency, but more commonly it is done by drawing a draft on a city correspondent located in the vicinity of the presenting bank. Such a draft is an acceptable means of payment but entails the maintenance of a deposit with the city correspondent. To compensate for the extra trouble of keeping a deposit with the city correspondent, the drawee bank may remit something less than the face amount of checks presented. This deduction is known as an "exchange charge."

Before the Federal reserve banks instituted their collection system, it was common practice among banks to deduct exchange charges from remittances for checks presented through the mails. One may properly ask where the advantage in such a practice lay. It is apparent that any single bank which succeeds in maintaining its position in the banking world must sometimes receive funds in the form of checks and drafts on banks located outside its home city in substantially the same amounts as checks drawn on it and presented through the mail from out of town. How could a bank gain by making exchange charges on its remittances if it in turn had checks to collect on which exchange charges must be paid? The real explanation of the tenacious manner in which many banks cling to the practice lies in the fact that circumstances make it a game at which only one party can play. City banks have always competed for the deposits of country banks, a practice which has resulted not only in the payment of interest on these balances but also in the performance of many free services, not the least of which was the collection of out-of-town checks for country correspondents and the crediting of the full face value of these checks to the country bank's balance without deducting an exchange charge. On the other hand, the country bank would collect checks on banks in its neighborhood,

remit for them as well as for its own checks sent in by the city correspondent, but deduct the exchange charge.

The advantages to the banking and business community arising from the smooth-working collection system of the reserve banks can be best visualized by a brief examination of the system which it superseded. The old system involved the use of correspondent banks as collecting agencies. The old national banking reserve requirements fitted into such an arrangement by permitting country banks to carry three fifths of their required 15 per cent reserves on deposit in banks in cities designated as reserve and central reserve cities. Reserve city banks in turn were permitted to carry one half of their required 25 per cent reserves on deposit with banks in central reserve cities. State banks also were permitted to count deposits with banks in the money centers as part of their reserves. Thus there developed a network of bank correspondents. Country banks were able to get interest on reserve balances and check collection service. In turn they collected checks sent them by the city correspondents. In order to avoid, so far as possible, the payment of exchange charges, city banks entered into reciprocal agreements with other banks to collect and remit at par for all checks drawn on surrounding banks. One result of this practice was that checks were not always presented by the most direct route. Instead, they tended to be sent to the "par points," where full credit would be obtained with no deduction for exchange. The collection process was therefore slowed down, and the size of the "float" of uncollected checks greatly increased.

Another circumstance prevailing at this time which augmented the size of the float was the practice by national banks of counting as part of their legal reserves any checks sent to their correspondents in the reserve or central reserve city, whether or not actually collected by such correspondents. There was thus a temptation to send checks to a nearby correspondent which would make no exchange charge,

regardless of the effect, favorable or otherwise, which such a move would have on the orderly collection process.

The excessive float resulting from the haphazard collection machinery has been commonly condemned on several scores. First, it had an inflationary tendency on the banking system by exaggerating the nominal legal reserves, caused by counting uncollected checks on other banks as reserve. Thus reserve accounts of country banks were expanded by the practice of granting immediate credit for uncollected checks. City banks were, in fact, making loans to their correspondents by the amount of the float. This difficulty, however, could have been corrected by a requirement that banks count only collected items as reserves. A second objection to the slow collection process and large float was the opportunity afforded for "kiting." This refers to the practice of drawing a check against one account to establish another. When immediate credit is given for checks deposited, it is possible to develop a series of accounts based upon nothing more substantial than uncollected checks on other banks. A third objection to the old pre-federal reserve collection system is found in the delay and expense involved in such a cumbersome arrangement.

The present collection system furnishes a smooth-working, economical method of collecting checks. The clerical work and the shipping of both checks and currency are kept at a minimum. The troublesome exchange charge is practically abolished, since most checks are collected at par. One should notice, however, that the system does not entirely avoid the cost of collecting checks. A large part of such cost is shouldered by the reserve banks, which carry on elaborate clearing operations and pay the expense of currency shipments between themselves and the clearing banks. A considerable item of expense in collecting out-of-town checks arises from the fact that the bank gets only deferred credit until collection is completed by the reserve bank. It follows, therefore, that a bank which receives an out-of-

town check from a customer and gives him cash or full immediate credit on his account is making a loan to that customer during the collection period, as well as incurring the expense of handling the check itself. It is not unreasonable, under such circumstances, that banks should insist that the customer bear this expense by carrying an adequate balance in addition to that represented by uncollected items or else pay a small service charge.

The Federal reserve collection system which we now have is the result of gradual development. The introduction of a system of clearing by the reserve banks was from the first considered one of the essential duties of the Federal Reserve Board. There were, however, a number of difficulties in the way. Country banks, in particular, which profited by the practice of making an "exchange charge" when remitting for checks presented through the mails, quite naturally resisted any movement in the direction of a compulsory remittance for checks at par, which would deprive them of their profit.

Voluntary plans for clearing checks through the reserve bank were established in a number of districts in June, 1915, with but little success. Less than 25 per cent of the banks eligible to join such plans did so.⁵ Therefore a new plan, compulsory upon all member banks, was started on July 15, 1916.⁶ Under it all member banks were permitted to send checks to the reserve banks for collection and were required to remit at par to the reserve banks for all checks drawn on themselves and presented through the reserve banks. This is substantially the present form of the collection system, except for the fact that the reserve banks originally levied a charge for collecting each item. Since 1918 no charge has been made for this service. By amendment on June 21, 1917, Section 13 of the Federal Reserve Act was changed specifically to permit nonmember banks to participate directly in the collection service of the reserve banks by establishing clearing balances with the reserve

⁵ *Annual Report of the Federal Reserve Board*, 1915, p. 16.

⁶ *Ibid.*, 1916, pp. 9-10.

banks. Most nonmember banks, however, seem to prefer to utilize the services of member bank correspondents rather than to maintain such balances

Introduction of par collection of checks. It is evident that the introduction of the compulsory collection plan in 1916 compelled all member banks to remit to their Federal reserve banks at par for checks sent in for payment. Since this economical way of collecting checks on such banks was available, they were forced by circumstance to give up exchange charges no matter through what channel checks were presented.

From the first, the reserve banks insisted upon par remittance by member banks. There were, however, a large number of nonmember banks which were very reluctant to give up the remunerative practice of charging exchange. On the other hand, an effective par collection system could hardly be established without bringing in nonmember as well as member banks. There was the further point that banks which charged exchange were unfairly enjoying the benefits of the par collection system, since they sent their out-of-town checks to member bank correspondents and had them collected at par through the reserve banks. The reserve banks, therefore, set themselves the task of bringing all nonmember banks into the par system.

In many districts it was relatively easy to persuade nonmembers to remit at par. In areas where member and nonmember par banks were in direct competition with the nonpar banks, the latter were at the very obvious disadvantage of seeing checks drawn on them accepted at less than par. In other areas where competition of par banks was less important, many banks refused voluntarily to remit at par. The reserve banks thereupon adopted the plan of employing some agency to present checks at the windows of the banks where full payment in cash could not be avoided. This method was quite effective in reducing the number of nonpar banks, for it prevented the use of drafts on interest-bearing deposits in correspondent banks for the

remittance and required larger amounts of vault cash. Much opposition to the use of such agents by the reserve banks for direct presentment of checks on nonpar banks arose among nonmember banks. The Federal Reserve Board, however, justified and approved of the action taken by the reserve banks. It held that since Section 13 of the Federal Reserve Act⁷ specifically permitted the reserve banks to receive from member banks checks and drafts payable on presentment, and since Section 16 permitted the exercise of clearing functions for members, it was necessary that the reserve banks should accept any and all checks, whether drawn on par or nonpar banks. Since the act⁸ specifically prohibited the payment of exchange charges by the reserve banks, they had no choice except to proceed to collect checks on nonpar banks at the window.⁹

Direct presentment of checks for cash (at the window of the drawee banks) by the reserve banks was resisted in two ways. First, banks endeavored to obtain injunctions against the reserve banks, restraining them from collecting checks in any manner other than through the mails. They charged that the reserve banks were guilty of oppressive, embarrassing, and highhanded methods in their attempts to enforce par collection. The Supreme Court of the United States, in a decision rendered on June 11, 1923, established the right of Federal reserve banks to collect a check drawn on any bank if the check is "payable on presentation and can in fact be collected consistently with the legal rights of the drawee without paying an exchange charge."¹⁰ Thus checks might be presented for payment in cash at the window provided none of the legal rights of the drawee bank was violated.

In the meantime laws were passed in several states which were designed to protect nonpar banks from being coerced

⁷ As amended September 7, 1916.

⁸ As amended June 21, 1917.

⁹ *Annual Report of the Federal Reserve Board*, 1919, p. 41.

¹⁰ See *Federal Reserve Bulletin*, 1923, p. 788; 262 U. S. 643

into joining the par system.¹¹ These laws either required all state banks to make an exchange charge on checks presented by any bank or other collection agency (as was the case in Mississippi), or gave them the right to make charges (as in the case of Louisiana and South Dakota). Protesting checks for nonpayment because of refusal to remit at par was commonly prohibited. In another decision rendered on the same day as the one previously cited, the United States Supreme Court upheld the constitutionality of a North Carolina law authorizing state banks to charge exchange and to make payments in exchange drafts when checks drawn on them were presented by or through the Federal reserve banks.¹²

Thus the power of the reserve banks to compel nonmembers to join the par system was confined to the presentment of checks at the windows of nonpar banks for full cash payment only when not prohibited by law. Obviously, the way to an establishment of a complete par collection covering all parts of the country was definitely blocked. The Federal Reserve Board, therefore, directed the reserve banks to discontinue the use of agents other than banks for the purpose of making collections at par of checks drawn on nonpar banks.¹³ At the present time the reserve banks are forbidden to receive any check drawn on a nonpar bank.¹⁴

Collection of nontransit items. The collection facilities of the Federal reserve banks are not limited in use solely to the collection of checks. Section 13 of the Federal Reserve Act permits the reserve banks to receive, for collection, maturing notes and bills of exchange. A member bank owning a note or bill of exchange payable in another city may therefore utilize the services of the reserve banks to effect its presentment and payment. If the note or bill

¹¹ For a discussion of this see "The Development of Par Collections by Federal Reserve Banks," *Letter No. 6*, Federal Reserve Bank of Richmond, May, 1922.

¹² *Federal Reserve Bulletin*, 1923, p. 789 (202 U. S. 649).

¹³ *Federal Reserve Bulletin* 1923, p. 1194.

¹⁴ Federal Reserve Board, *Regulation J*, Section III (3).

is collectible without cost through some member bank, the reserve bank, on receipt of the proceeds, credits the full amount to the reserve account of the member sending it in for collection. If the reserve bank is compelled to pay a collection fee to the bank presenting and collecting the instrument, it credits the account of the original member for the amount, less the collection charges. Items which are sent to other Federal reserve districts for collection are settled in the same general manner as interdistrict check collections.

Federal reserve exchange. It was the custom of banks in the days before the establishment of the Federal reserve collection system to maintain balances in reserve and central reserve cities. These balances were desirable and necessary in order to handle the task of getting checks collected and remitting for checks presented by other banks through the mails. Further, such balances were useful to draw against when customers desired to use drafts on the financial centers instead of personal checks for making payments.

The introduction of the Federal reserve system, with its required balances carried with the reserve banks, made it desirable to reduce the need for carrying balances with city correspondents. One step in this direction was the development of the par check collection system already described. Another was to provide facilities, through the Federal reserve banks, for furnishing drafts to customers payable on the money centers of the country. In order that member banks may furnish their customers with drafts payable at sight in any city without carrying an account with correspondents, a special system was arranged. Member banks were given the privilege of drawing two types of drafts against their reserve accounts with their Federal reserve banks, enumerated below: ¹⁵

1. Federal reserve exchange drafts might be drawn by a

¹⁵ "Federal Reserve Exchange," *Letter No 17*, September, 1924, Federal Reserve Bank of Richmond

member bank agreeing to use a special form of draft and further agreeing to notify the reserve bank on the day such drafts were drawn. These drafts were receivable at any reserve bank at par for immediate credit. The Federal Reserve Bank of Richmond permitted such drafts to be drawn in amounts up to \$250. Later the amount was increased to \$5,000 in an effort to popularize the use of the exchange draft¹⁶

2. Federal reserve transfer drafts could be drawn for transfer of larger amounts. These drafts were to be made payable at any specified reserve bank and were to be received at par at the designated reserve bank. As a condition for their use, however, the drawing member was required to give notice of such drafts to the drawee reserve bank, which in turn was required to give notice, through the leased wire system, or otherwise, to the designated bank.

The transfer drafts were obviously cumbersome and were never put to any substantial use. In the Chicago district, the maximum size of the exchange draft is now \$50,000, while the use of the transfer drafts has been abolished.¹⁷

This attempt to establish the use of drafts on the reserve banks as a means of interdistrict remittances in place of drafts on city correspondents has largely proved fruitless, owing to the continuation of the practice of carrying bankers' balances with city correspondents. By paying interest and performing other services, the city correspondents have made it worth while for country banks to maintain their deposits with them for use as working reserves. By 1924 it was reported that only a few member banks had elected to make use of the exchange draft.

Telegraphic transfers. An additional service which the reserve banks offer to members is the right to utilize the leased wire system, maintained between the Board of Governors at Washington and the several reserve banks and

¹⁶ *Ibid.*, pp. 3, 5.

¹⁷ *Bulletin No. 202*, July 29, 1925. Letter of December 29, 1933.

branches, for the transfer of funds by wire. The leased wire system was inaugurated on June 4, 1918.¹⁸ On July 1, 1918 daily settlements between reserve banks through the Gold Settlement Fund were begun, which further facilitated the use of the telegraphic transfer system.

At the present time any member bank may request its reserve bank to transfer to any other member bank, whether located within or outside its own district, any sum of money in multiples of \$100. Such a request may be sent to the reserve bank by mail or by telegram sent "collect." On receipt of this request, the reserve bank deducts the amount from the member's reserve account. If the member bank which is to receive the credit is located in the same district as the sending member, the transfer is merely a matter of a bookkeeping entry. If the bank which is to receive credit is located in another district the reserve bank will telegraph the reserve bank of that district to credit the receiving member bank's reserve account. Settlement between reserve banks is made daily through the Interdistrict Settlement Fund. The member bank receiving the credit is advised by mail by the reserve bank when the transfer is complete. In special cases involving large sums, and when a request is made, the reserve bank advises the receiving member by telegraph at the member bank's expense.¹⁹

The above-described services are performed free for member banks over the private wire system of the reserve banks. In addition, other telegraphic transfers over commercial wires will be made at the expense of member banks. Such transfers may be for any amount and will be accepted from and paid to member banks only, but may be made for the use of any other bank or business firm.

Summary. The par collection instituted by the reserve banks has done much to increase the acceptability of bank

¹⁸ "Telegraphic Transfers" *Letter No. 19*, Federal Reserve Bank of Richmond, July, 1926, p. 3.

¹⁹ *Ibid.*, p. 8; *Bulletin No. 197*, Federal Reserve Bank of Chicago, July 1, 1924.

checks throughout the country in making out-of-town as well as purely local payments. At most they suffer a discount of $\frac{1}{10}$ of 1 per cent charged against the individual or firm depositing them for credit as a service or interest charge to compensate the collecting bank for the time and trouble involved in making the collection. Regardless of seasonal changes in the direction of trade, we have in a bank check drawn on a par bank an instrument acceptable at par. For purposes which are not adapted to the use of personal checks, the Federal Reserve System provides exchange drafts payable at par at any reserve bank. In addition, member banks have available the telegraphic transfer system, which enables them without delay or cost to build up their accounts with city correspondents at the expense of their reserve account with the Federal reserve bank, thus placing themselves in a position to provide drafts on city correspondents without expense if that method of furnishing exchange drafts on other cities is preferred to the use of the Federal reserve exchange drafts.

Before the Federal reserve facilities were developed, the seasonal shifts in the demands for funds in different parts of the country resulted in the appearance of a premium or discount, as the case might be, on drafts payable in distant cities. For example, suppose country banks during the summer lull desired to transfer funds to their correspondent in New York City. Two ways of making the transfer existed: (1) currency might be shipped; or (2) drafts payable in New York City might be purchased if any were available. Such drafts would sell at a premium equal to the cost of shipping currency. In the autumn, when country banks wished to recover their funds from the city banks, they might pay transportation charges on currency or sell drafts on New York. The discount on such drafts would again appear equal to the cost of shipping currency. At the present time we possess nearly as perfect a system of making payments quickly and with small cost as one could desire.

CHAPTER VII

THE BANK'S ASSETS (RESERVES)

The assets of a bank are of two general classes. The first class consists of "earning assets" and is made up of loans and investments on which interest is received. The second class includes assets which do not in themselves earn any direct income but merely facilitate the banking functions that give rise to the "earning assets" proper. Nonearning assets consist of fixed investments in building and fixtures,¹ cash items, and the bank's primary reserves. Our analysis of bank assets may best begin with the non-earning assets which constitute the reserves.

Bank Reserves

A bank receives deposits which are obligations to pay cash according to the terms of the deposit contract. If the depositors of a bank are sufficiently numerous, there is a reasonable expectation that funds withdrawn on any given day by one group of depositors will be offset in large measure by new deposits of funds by other customers. This expectation is increased if a considerable degree of diversification exists among the depositors' business interests. If a banker were certain that new deposits and withdrawals would actually offset each other every day, the need for cash would be small indeed. Actually a considerable vari-

¹ Exception might be made for that part of the bank building which is sometimes not utilized for banking purposes but is leased for office space, and thus earns a direct income for the bank.

ation in the rate of new deposits and withdrawals exists from day to day, even though the general level of the bank's deposits may be quite stable. To be prepared to meet these variations, the bank must carry cash reserves in sufficient amount to insure its ability to fulfill its obligations as they arise.

Size of cash reserves. The relative size of the cash reserves on the one side, and of deposit obligations on the other, depends upon a number of considerations.

1. The number of depositors and the diversity of their business interests.

- 2 The confidence of the public in the bank. (Evidence of this is found in the excessive cash holdings of banks during times of bank failure.)

3. The particular nature of the deposits. (For example, customers who have periodic payroll requirements present special reserve problems.)

4. The readiness with which the bank can increase its cash by borrowing or liquidating its earning assets.

5. The demand for loans at the time. (If business is depressed, bank reserves tend to rise because of a lack of outlet for loanable funds.)

Form of primary reserves. The primary reserves of a bank take the form of cash in the bank's own vaults and demand deposits with other banks. Banks which are members of the Federal Reserve System carry reserve balances with two kinds of banks. First, the law requires that an amount equal to a certain fractional part of the deposits be maintained with the Federal reserve bank. This constitutes the "legal" reserve. In addition, banks normally carry deposit balances in banks of cities with which the local community has active trade relations.

Barring some contingency which may make them unavailable when wanted, the deposits in other banks are the equivalent of cash to the depositor bank. Further, they have other advantages over vault cash. Many checks

which are drawn by the customers are sent out of town and are presented for payment through the mails by banks in other cities. A draft drawn on a reserve balance in the bank of another city is an acceptable means of paying these checks and is cheaper than shipping cash. On the other hand, the bank receives from depositor-customers checks and drafts payable in distant cities. These checks are sent to city correspondents for collection, and the proceeds may then conveniently be credited to the sending bank's reserve account. Thus it is evident that balances carried in banks of other cities may be as useful a form of reserve as is cash in the bank's own vault. Further, in the past it has been the practice of city correspondents to pay interest on such deposits, thereby adding to the attractiveness of carrying reserves in deposit form.²

Importance of vault cash. The proportion of reserves carried as cash in vault compared with that carried in deposits in other banks varies considerably from bank to bank, depending upon particular conditions. If the bank in question is located near the bank in which it carries its reserve balances, its cash can be allowed to fall to the minimum required for current over-the-counter uses. If any extraordinary demand for cash arises, it is but a question of a few hours at most until cash can be obtained. On the other hand, if the bank is remotely situated from its depository bank, its cash requirements will be somewhat higher. This is well illustrated by Table III, on page 91.

Legal reserves and working reserves. Guided by experience, the intelligent banker will maintain such a proportion of his deposits in cash as will readily enable him to meet all demands. To do less is to court disaster. If the banker carries more than is reasonably necessary, he cuts down his

² This practice has ceased with the prohibition of payment of interest on demand deposits by all insured banks. Formerly member banks maintained with the Federal reserve bank, which pays no interest on deposits, only those reserves required by law. Other reserves were deposited with interest-paying banks.

TABLE III

RESERVES OF NATIONAL BANKS IN PERCENTAGE OF GROSS DEPOSITS*
(As of June 30, 1933)

	<i>Central Reserve City Banks</i>	<i>Reserve City Banks</i>	<i>Country Banks</i>
Cash in vault	8%	12%	19%
Due from Federal reserve bank	12.7	7.7	6.1
Due from other banks	4.4	14.8	9.8
Total reserves	17.9	23.7	17.8

* Compiled from the *Annual Report of the Comptroller of the Currency*, 1934, pp. 113-133

earning assets and reduces his profits. Here in the United States the chartering of banks has been carried on with such a lack of discrimination, in the belief that individual freedom should extend to banking, that a great many banks have been founded and operated by persons with little skill or natural ability as bankers. The resulting failures and the attendant public inconvenience have brought about universal regulation of banking operations. These regulations have included the fixing of minimum reserve requirements.

It thus happens that all commercial banks in the United States are required, by law or by orders of supervising authorities, to maintain certain minimum reserves against their deposit liabilities. The law normally forbids the making of any new loans or the paying of any dividends while reserves are below the legal requirements. In addition, there may be specific penalties attached for failure to maintain reserves at the proper figure.³ The effect of these legal reserve requirements are that, (1) a bank cannot legally expand its loans when its reserve is deficient; and (2) in the face of penalties, it is loath to pay out cash when by doing so it impairs its legal reserve position.

The result of this attitude toward legally required reserves is that in practice such reserves constitute, for the individual bank involved, nothing more than a possible last line of de-

³ This is true of members of the Federal Reserve System.

fense against emergency depositor demands. Indeed, in the past they have failed to function even in that capacity. In the days before there were Federal reserve banks to come to their rescue, banks periodically found themselves unable to meet depositors' demands without impairing their legal reserves. Under those circumstances they chose to suspend payments temporarily rather than reduce their reserves below the legal minimum. It follows, then, that legal reserves constitute funds which add little, if anything, to the direct liquidity of a bank.

This peculiar development in the attitude of bankers toward legal reserves has caused the Committee on Bank Reserves of the Federal Reserve System to conclude that the legal reserve requirements for member banks are useful only: (1) in influencing the volume of bank credit which can be maintained by the banks; and (2) in supplying the Federal reserve banks with funds with which "to pursue an effective banking and credit policy."⁴ It follows, therefore, that banks must carry working reserves in excess of their legal minimum requirements in order to function properly. These working reserves for member banks may consist of: (1) cash in the bank's own vault, (2) demand deposits with other banks, and (3) deposits with the Federal reserve bank in excess of the legal requirements. In the case of nonmember banks, working reserves over and above the legal requirements may likewise be carried in any manner which best suits the needs of the banks. Before the passage of the Banking Act of 1933, nonmember banks received interest on that part of their reserves, legal and otherwise, which was deposited with other banks. The member banks received no interest on legal reserve balances in the Federal reserve banks but did obtain interest on their other working reserves deposited elsewhere. However, the prohibition of payment of interest on demand deposits under the 1933 law effec-

⁴ *Report of the Committee on Bank Reserves of the Federal Reserve System, 1931*, p. 5. Member banks are required to carry their legal reserves as deposits in the Federal reserve banks.

tually prevents either legal or working reserves of any banks from earning interest

One should note that in practice the legal reserves of banks are actually in a constant state of flux. They constitute a reservoir in and out of which payments may be made continuously, while the general level remains about the same. Above this are the working reserves which are depended upon to absorb any short-time net changes in the cash position of the bank. The size of this excess of working reserve will normally depend upon. (1) the till money requirements from day to day; (2) the probable short-time variations in net deposit withdrawals; and (3) the ease or difficulty with which earning assets (secondary reserves) can be converted into cash. Members of the Federal Reserve System which are located near Federal reserve banks and are in possession of assets readily usable for borrowing at the reserve banks carry a low volume of such working reserves, while those at greater distances carry more.⁶

Legal reserve requirements.⁶ The reserves required of banks belonging to the Federal Reserve System vary with the classification of the city in which the bank is located. This can best be shown by the following table.

TABLE IV
STATUTORY RESERVE REQUIREMENTS FOR MEMBER BANKS

	<i>Against Net Demand Deposits</i>	<i>Against Time Deposits</i>
Country banks	7%	3%
Reserve city banks	10	3
Central reserve city banks	13	3

The National Bank Act designates New York and Chicago as "central reserve cities" and certain other cities as "reserve cities," subject to the right of the Board of Governors to

⁶ See Table III on page 91. Reserve city banks carry on the average larger working reserves in the form of bankers' balances than country banks, because of their larger holdings of country bank reserve balances.

⁶ For a complete summary of state bank legal reserve requirements, see the *Federal Reserve Bulletin*, March, 1937.

make changes in the classification as desired. In addition, the Federal Reserve Act permits the Board of Governors, by a vote of five, to modify the classification of banks in outlying areas of reserve and central reserve cities so as to reduce their reserve requirements. Under this provision the board has reclassified most banks in those parts of Chicago and New York which are outside the main financial areas, and as a result, central reserve city banks include only banks in the main financial districts of those cities. Further, the board is empowered to change the legal reserve requirements from an amount which is not less than the statutory requirements to one which is not over twice that figure. On August 15, 1936, the board raised reserve requirements 50 per cent, and on May 1, 1937, they were raised to double the statutory figure.

Method for computing legal reserve requirements. To compute its legal reserve requirements, a member bank must classify its deposits. Its demand deposits consist of all deposits not classified as time deposits. Time deposits comprise all unmatured deposits having more than thirty days to run until maturity at the time of the deposit, or payable in not less than thirty days after written notice. Saving deposits on which the bank may require not less than thirty days' notice are classed as time deposits, as are postal savings deposits. For purposes of this classification, a waiver by the bank of the right to demand notice or refuse payment until maturity does not change the character of a time deposit.

Demand deposits against which reserves must be carried are computed by deducting from the gross demand deposits the amount of "due from banks." This item includes all balances with other banks except the Federal reserve banks and foreign banks, and checks on other banks in process of clearing or collection. Gross demand deposits include government and individual demand deposits, "due to banks," and certified and cashiers' checks outstanding.

The Board of Governors, in its regulations dealing with

reserve requirements, observes that "it is essential that the law with respect to the maintenance by member banks of the required minimum balances be strictly complied with." Each member bank computes its reserve requirements upon the basis of its net deposits at the opening of each business day. Banks located in the same city with the Federal reserve bank or branch, or in other cities designated by the Board of Governors, compute their reserve needs by averaging the daily net deposit balances for each half-week period. Their actual legal reserves for this same period must, on the average, be equal to the required percentage of the average daily deposits. If the average reserves become deficient, a penalty is applied. To avoid this penalty, banks may increase their reserves during the latter part of the computation period by borrowing or rediscounting at the Federal reserve bank, so that the *average* reserve for the period may be adequate. Other banks compute their requirements in a similar manner, the only difference being that reserve city banks use a weekly period while the country banks use a semi-monthly basis.

The penalty for impairment of reserves is a charge of 2 per cent above the Federal reserve bank discount rate on ninety-day commercial paper on the first day of the month during which the deficiency occurred, and is applied to the average daily deficiency existing during any computation period. Chronic offenders may lose their charters if they are national banks, or their membership in the Federal Reserve System if they are state banks.

Methods of adjusting legal reserves. A member bank which finds its legal reserve position impaired may resort to any one of several methods for remedying the situation. The most simple and direct way to increase reserves with the Federal reserve bank is by the transfer of working balances carried with other banks, when they can be spared. A second method, almost as simple, is to reduce call loans made on the central money markets either directly, if the bank is so located as to be making direct loans of this sort, or indirectly,

if its call loans are being made through city correspondents.

If neither of these methods is available or adequate to meet the bank's needs, readily salable assets may be disposed of in the open market. Bankers' acceptances and short-time government obligations are particularly adapted for this use. Finally, the member may rediscount eligible paper with the Federal reserve bank or borrow from it in order to build up its reserve. In the long run, of course, as the ultimate method of increasing reserves, the loans and investments other than those mentioned above may gradually be scaled down.

Borrowed reserves. Over a short period of time, member banks sometimes find it advantageous temporarily to purchase or borrow reserves from other members which at the moment have an excess. This is profitable for the lending bank if the rate paid by the borrowing bank is in excess of the rate on short-time investments available in the open market. Likewise, the borrowing bank gains if it has no bankers' acceptances or other low-yield, short-time paper to dispose of, provided it can borrow reserves at a rate below the rediscount rate of the Federal reserve bank. Since the Federal reserve discount rate is often higher than the rate on bankers' acceptances and short-time treasury obligations, the transaction may prove desirable to both banks involved. In practice, banks with acceptances and call loans often prefer to borrow "Federal funds," as reserves are called, to take care of a temporary deficiency, rather than dispose of acceptances and call loans. Early in 1937, when bankers' acceptances were earning $\frac{1}{4}$ of 1 per cent and call loans 1 per cent, Federal funds were being borrowed at $\frac{1}{8}$ of 1 per cent in New York City. The Federal reserve rediscount rate at that time was $1\frac{1}{2}$ per cent.

The process of lending reserves may involve the issue of a cashier's check by the borrowing bank (listed in its statement as money borrowed instead of deposits). The lending bank either issues a draft on the Federal reserve bank to the borrowing bank or arranges for a transfer by the reserve

bank of funds from its reserve balance to that of the borrowing bank.⁷

Legal reserve requirements vary with classification of cities. Cities and towns of the United States are classified as: (1) country districts; (2) reserve cities, and (3) central reserve cities. The reserves required against the demand deposits of member banks are 7, 10, and 13 per cent, respectively, for banks in the different locations (On May 1, 1937 they were raised to 14, 20, and 26 per cent by order of the Board of Governors of the Federal Reserve System.)

Reserve requirements based upon the city in which the bank happens to be located are a form of historical accident rather than an arrangement arising from present-day needs. When the present Federal Reserve System was adopted, it took over bodily the classification of cities of the old national banking system. Under that system banks in cities classified as reserve and central reserve cities were permitted to carry on deposit part of the legal reserves of the national banks in cities of inferior classification. Naturally, the more responsible task of carrying reserve balances of other banks led to the legal requirement of higher cash reserves.

Today all legal reserves of member banks are held by the Federal reserve banks. Yet many banks in reserve and central reserve cities carry part of the working reserves of other banks and might properly be expected to maintain themselves in a more liquid position. However, we have seen that legal reserves under the present practices are not relied upon to furnish liquidity. It appears, therefore, that the only possible reason for requiring higher reserves in one class of city than another has disappeared.

Criticism of existing reserve requirements. There are several objections to the present basis for computing legal reserve requirements for member banks, each of which will be considered in turn. The requirement that all legal re-

⁷ *Federal Reserve Bulletin*, February, 1930, p. 81

erves must be deposited with the Federal reserve bank handicaps the banks which are not located in the immediate vicinity of the reserve banks. As we have seen, reserve city and country banks find it necessary to carry considerably more cash in vault in proportion to their deposits than do the central reserve city banks. There seems to be no good reason for this discrimination.

The existing method of computing reserve requirements is also criticized on the ground that it fails to exercise sufficient automatic control over the credit situation.⁸ The criticism centers around two features. First, the low reserve ratio on time deposits tends to cause banks to induce depositors to shift part of their demand deposits into the time-deposit classification. As a result, some time deposits may have an unusually high turnover, while an abnormal turnover of the remaining demand deposits may appear. Thus the low reserve against time deposits permits an expansion in the total volume of bank credit on the basis of a given amount of reserve funds. The second feature criticized is the complete lack of any offset for a rapid increase in the velocity of deposits. It has been properly pointed out that unsound inflationary conditions may arise quite as easily out of a rapid increase in the rate at which bank deposits are spent as out of an increase in the absolute amount of deposits. For example, between 1926 and the peak of the boom in 1929, the net deposits of member banks expanded about 12 per cent while debits to individual accounts rose about 66 per cent.⁹

Proposed remedies. The Committee on Bank Reserves proposed to remedy these defects by a complete change in the basis for legal reserve requirements. Their proposals were: (1) to abolish the distinction between time and demand deposits; (2) to abolish the exemption of government deposits from reserve requirements;¹⁰ (3) to require a flat

⁸ *Report of the Committee on Bank Reserves of the Federal Reserve System*, 1931

⁹ *Ibid.*, p. 10

¹⁰ This change was incorporated in the Banking Act of 1935.

reserve of 5 per cent against all *net* deposits; and (4) to require an additional reserve equal to 50 per cent of the average daily withdrawals from all deposits. In order that the reserve requirements might not become excessive, the maximum was fixed at 15 per cent of a bank's *gross* deposits. Some banks with highly active accounts might find the 50 per cent rule prohibitive, hence the limitation. In order, however, to make such a bank feel some restriction, the 15 per cent limit would apply to gross deposits. A bank with highly active deposits receives an abnormally large volume of checks, which are deductible, however, in computing net deposits. To prevent the 15 per cent limit from being abnormally low, gross deposits would therefore be used. Finally, (5) it was proposed that banks not located near a Federal reserve bank be given the privilege of counting vault cash as part of their legal reserve up to three fifths of the total. Other banks would be permitted to count vault cash up to one fifth of the total required reserve.

Criticisms of proposed reforms. The proposal that legal reserves of banks should be made to vary with the activity or velocity of bank deposits has been severely criticized by B. M. Anderson, economist for the Chase National Bank of New York City.¹¹ He believes, first, that the restrictive effects of increased required reserves with increases in deposit activity are likely to be too belated to be effective. He holds, for instance, that the speculative boom in the stock market in 1928 and 1929 accumulated fuel in the form of excess reserves and expansion of credit during the preceding period when activity of deposits was low and money rates easy. Second, he holds that the tendency for the activity of deposits to remain high after the collapse of commodity and security booms and during the early period of liquidation would make reserve requirements based upon activity extremely inconvenient. It would accentuate the pressure for liquidation at a time when ease in the money market is required to permit more orderly liquidation to be accomplished.

¹¹ *Chase Economic Bulletin*, April 25, 1932, Vol. XII, No. 1.

In the third place, he points out that, quite irrespective of speculative booms, there are cycles in the activity of bank deposits, which grow out of year-end business settlements and the longer settlement periods in agricultural regions where seasonal increases in activity sometimes continue for a period of several months. It would be unfortunate, he holds, to introduce a restrictive element into the banking situation merely because of the occurrence of such normal business variations. Particularly is this true in the light of the attempt of the Federal Reserve System to ease the pressure arising from seasonal variations in business and banking needs. Finally, he believes that the introduction of an inadequate automatic restriction upon the credit situation might reduce the feeling of responsibility on the part of the Board of Governors for taking positive action to check undue expansion through proper control of open-market and discount operations.

CHAPTER VIII

THE BANK'S EARNING ASSETS (SECONDARY RESERVES)

The earning assets of a bank consist of all of the negotiable paper held by it, whether obtained by making advances to the bank's customers or by purchase in the open market. Further, they include all of the securities, both bonds and stocks, which the bank holds for investment. Finally, they include balances deposited with other banks insofar as these bear interest. These assets, then, are at the center of the whole banking operation. Upon their successful accumulation and arrangement depends the welfare of both the stockholders and the depositors. If they are sound and sufficiently liquid, the bank will be able to meet readily the demands of its depositors. Furthermore, they are the main source of revenue from which the expenses incident to banking operations and stockholders' dividends are to be met. One may classify the earning assets into three major groups: (1) secondary reserves; (2) loans to customers; and (3) bond investments. This classification is useful in spite of some tendency toward overlapping.

Relation of primary to secondary reserves. The primary reserves of a bank consist of cash on hand and demand deposits in other banks which are equivalent to cash. The relation of these reserves to the bank's deposits has been discussed in the preceding chapter. It appeared, from that discussion, that the minimum reserves which the law requires to be maintained against deposits are, in practice, of little

value to the banker in meeting the depositors' demands for cash. Actual drains of cash, whether over the counter, through adverse clearing house balances, or through an excess of checks presented by out-of-town banks, must be met out of actual cash or out of deposits in other banks in excess of legal reserve requirements. This excess, comprising what might be called the "working reserve," in contrast to the legal reserve, must be adequate to care for most day-by-day demands in the case of those banks which are too remote from the money market to be able to replenish reserves on a moment's notice.¹ Even the working reserve must be maintained at some reasonable level in order that the bank's business may move on without interruption. It is apparent, therefore, that any substantial variation in the incoming or outflowing cash of a bank cannot be cared for by drawing on either the legal or the working reserves. Since all banks are from time to time subject to drains arising from the idiosyncrasies of the individual depositor, the irregular and seasonal variation in the requirements of business, or possible temporary losses of depositor confidence,² they must be prepared to increase their cash holdings quickly, easily, and without loss. In order to do this, a bank should number among its assets loans and investments of a highly liquid nature, in sufficient quantity to provide against all normal cash requirements that might possibly arise. The bank assets that are of this highly liquid nature are referred to as "secondary reserves."

Size of secondary reserves. The relative size of a bank's secondary reserve depends upon a variety of circumstances. Primarily, the nature of the bank's business, the diversification of deposits, the seasonal variations in cash requirements, all determine the volume of highly liquid assets required by

¹ This is not strictly true since the method of computing member bank reserve requirements permits some daily variation in actual legal reserve, provided that the average for any given computed period is up to the legal requirement.

² This is particularly likely in times of acute depression and business failures.

any individual bank. The correct amount can be discovered only through experience. In addition to the minimum requirements indicated by experience, the conservative banker must necessarily allow for unusual, unpredictable needs. Local or general depression in business often tends to set up a heavy adverse trade balance for a given area, which then experiences heavy drains of cash out of the banks located therein. A loss of confidence in banks growing out of business and bank failures may also create trouble. Since such needs are more likely to arise at the culmination of periods of prosperity or boom, it would seem desirable that particular care be taken to maintain a high proportion of liquid assets at such times.

The impossibility of generalizing too much in the matter of necessary secondary reserves is emphasized by Mr. Fred A. Garlock in an article entitled "Two Country Banks in Iowa and Virginia":³

Measures intended to assure the solvency of country banks often are formulated with little regard for the vast differences among these institutions. The differences are not merely nominal. On the contrary, they are so great that requirements or policies which may be well adapted to some banks are sometimes totally unsuitable for others. Although much can be said in favor of uniform standards of banking practice, it is easily possible to carry the idea of uniformity too far.

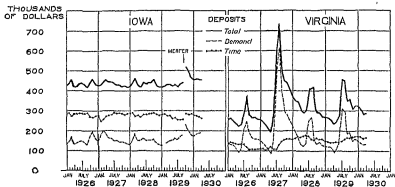
An excellent example of this point is found in the varying needs of country banks for liquid assets. Instead of discussing the subject in general terms, let us use two banks, representing widely different types of country banking, for comparative analysis. Both institutions were organized before 1910 and still maintain open doors to their customers. Although their policies may not have been the best, the banks at least have survived these troublesome times.

The comparison begins with the types of agriculture served by the banks. One is located in central Iowa where a combination of crop and livestock enterprises produces a year-round income for farmers, and the expenses of production also are spread through-

³ Quoted by permission from the *American Bankers Association Journal*, October, 1932, pp. 54-57.

out the year. The other is located in a section of Virginia where the principal sources of income are early white potatoes, peas, lima beans and a few other perishables. Expenses of production in this area are heavy from November to the middle of June, but the marketing season covers only the period from May through September. A large part of the income is received in June and July.

The effects of these differences are clearly apparent in the deposit trends of the two banks. In the Iowa bank, deposits run a comparatively even course with little fluctuation from one time of the year to another. Deposits of the Virginia bank, however, rise to a tremendous peak from May to July or August, after



From American Bankers Ass'n Journal, Oct., 1932

Variations in Deposits of an Iowa and a Virginia Country Bank

which they fall continuously to a low point in the following summer. Moreover, changes in the annual minimum and maximum levels of deposits are greater in the Virginia bank than in the Iowa bank.

In so far as the seasonal demands of depositors determine the need for liquid assets, it is obvious that these two banks are in radically different positions. Seasonal requirements of the Iowa bank's depositors impose little need for liquidity, as a comparatively small cash reserve would absorb most of the fluctuations of deposits. But the Virginia bank must hold liquid assets in July or August equal to 40 to 50 per cent of its deposits if it is to meet the withdrawals which commonly occur in the following months. An extra margin of liquid assets is needed to protect against annual changes in the lows of deposits. As the seasonal trough

of deposits is approached, the volume of liquid assets needed, of course, grows less

In both banks the need for liquidity arises more largely from the demand accounts than from time and savings accounts. . . .

An interesting method for computing the needed secondary reserves for any particular bank has been proposed by Elmer Hartzel⁴ He suggests that the expected maximum fluctuation in deposits be added to the changes in local loans if they move in opposite directions and that one be subtracted from the other if they move in the same direction, in order to find the secondary reserve requirements to meet the needs for any particular time. Thus, if deposits tend to decline while local loans also decline, the decline in local loans provides the funds to meet deposit withdrawals. But if local loans increase with deposit withdrawals, secondary reserves must be available to meet the combined losses of cash from both sources.

Composition of secondary reserves. There is some difference of opinion as to the specific type of banking assets that can properly be classified as secondary reserve. In one respect, however, there is general agreement. Secondary reserves should consist of *assets which can be turned into cash promptly and without loss*. Ready marketability is therefore a prerequisite for assets whose maturity is not immediate. Moreover, even readily marketable bonds should be reasonably near to maturity to avoid the possible loss attending a sale in times of tight money and high interest rates. Banks frequently find it necessary to dispose of bonds when high money rates cause the longer maturing, fixed interest-bearing obligations to lose market value.

More specifically, secondary reserves may include high-grade, readily marketable bonds nearing maturity. In addition, they may comprise high-grade, short-time commercial paper and bankers' acceptances. Prime commercial paper

⁴ "The Measurement of a Bank's Secondary and Investment Reserves," *Journal of Business*, October, 1934, p. 344.

purchased in the open commercial paper market is well adapted for use as secondary reserve for several reasons. First, it can be purchased in amounts and with maturities which suit the needs of the individual banker. It is issued in convenient denominations. Maturities can be arranged so that funds will be forthcoming to the bank at such times as banking needs dictate. Since open-market borrowers do not ask for renewals, their paper can be relied upon as a certain source of cash. Further, commercial paper, when within ninety days' maturity, is normally eligible for rediscount and can be turned into cash through sale, after indorsement, to the Federal reserve bank.

Bankers' acceptances form another valuable addition to secondary reserves. They are desirable because of their high quality and relatively short maturity. Their ready marketability is augmented by the willingness of the Federal reserve banks to purchase them at a quoted buying rate. The same advantages exist for short-term government obligations. In addition, government securities, both long- and short-term, may be used as collateral for member banks borrowing at the Federal reserve banks.⁵

Call loans on the stock market also play an important part in secondary reserves. They are favored by the banker since they furnish him the most convenient method for making daily adjustments in his reserve balances. When reserves are above normal, the bank can increase call loans, while a reversal of the process enables it to correct reserve deficiencies.

There is a difference of opinion as to the propriety of including customers' paper eligible for rediscount as part of a bank's secondary reserve. To be sure, a member bank is normally able to obtain additional cash or reserves through the process of rediscounting. Why, then, should not such paper be counted as secondary reserve? Several reasons can be suggested. First, customers' paper cannot be redis-

⁵ In some instances state banks are allowed to satisfy part of their legal reserve requirements with holdings of government bonds.

counted without the member bank's indorsement. Therefore the bank cannot sell the paper outright as it can bonds, bankers' acceptances, and short-time treasury obligations. There exists always the contingent liability to make good the paper if it is not paid by the customer at maturity. This consideration, combined with the fact that customers' paper is to a large extent renewed, means that the bank must normally stand ready to take up the paper by making a new loan to the customer to replace the old loan held by the Federal reserve bank. Finally, possession of eligible paper alone does not absolutely guarantee that the bank can obtain cash. Not only must the paper be eligible, but it must also be acceptable to the Federal reserve bank. Since the acceptability is partially based upon the member bank's indorsement, it follows that the Federal reserve bank may refuse to discount eligible paper for an overextended bank. Therefore eligible customers' paper virtually resolves itself into a basis for borrowing at the Federal reserve bank rather than a source of permanent cash resources. To the extent that the banker's need for secondary reserve represents a temporary need for cash to tide over a seasonal need, there seems to be little reason for denying that eligible customers' paper, can be classified as secondary reserve. Perhaps it would be correct to hold that an estimate of the secondary reserve needed to provide protection against contingencies other than regular seasonal needs should not include customers' eligible paper, while that part which is needed to provide for seasonal variation might well include such paper.

Merits of different types of secondary reserves. A very practical problem confronts the banker who has determined the volume of secondary reserves needed. Which of the several possible forms should such assets take? This question can be answered only in the light of information regarding the safety, convenience, yield, and availability of the different forms.

Perhaps there is little choice between the several forms of secondary reserves on the grounds of safety of principal.

Prime commercial paper, bankers' acceptances, and United States Government obligations, all rank high in this regard. There has been some tendency to criticize call loans on this score, but regardless of the embarrassment which banks experienced with call loans during the time preceding the establishment of the Federal Reserve System, recent experience has been most favorable. During the stock market crash beginning in October, 1929, the interior banks were able to liquidate their call loans readily and without loss. This was made possible by the willingness and ability of the New York City banks to lend call money freely to replace the funds withdrawn by corporations and country banks at the first sign of disaster.⁶

It must be noted, however, that the liquidity of call loans in times of financial stress depends in large measure upon the willingness and ability of the New York banks to come to the rescue and "bail out" the other bankers who are anxious to call their loans. The ability of the New York banks to bring assistance is further conditioned by their ability in turn to obtain advances from the Federal Reserve Bank of New York. It is improbable that the Federal Reserve Bank of New York would willingly shut off the needed funds and allow a stock market crash to develop into a financial panic.

Some idea of the earnings which the banker may hope to realize on various forms of secondary reserve can be obtained from the New York City open market rates. Table V shows such rates for the ten years ending 1935.

The volume of the various forms of paper appropriate for use as secondary reserve depends upon the state of business and the fiscal requirements of the government. It naturally follows that the banker's choice of secondary re-

⁶ During the week ending October 30, 1929, loans to brokers for out-of-town banks made by New York banks declined \$800,000,000, while the New York banks increased their own brokers' loans \$1,000,000,000. The Federal Reserve Bank of New York facilitated this action by discounting \$150,000,000 worth of paper for members and buying \$150,000,000 worth of United States Government securities in the open market. *Federal Reserve Bulletin*, November, 1929, p. 703.

TABLE V

NEW YORK CITY MONEY RATES *

<i>Date</i>	<i>Prime Commercial Paper</i>	<i>Prime Bankers' Acceptances</i>	<i>U S Certif- icates of In- debtedness</i>	<i>Treasury Bonds</i>	<i>Call Loans</i>
Jan. 1926	4¼-4½	3½-3¾	3 49	4.04	4 33
Jan. 1927	4 -4½	3¾-3¾	3.23	3 60	4 32
June 1927	4¼	3¾	3 09	3 47	4 33
Jan. 1928	4	3¾	3 31	3 35	4.24
June 1928	4¾	4 -4½	3 92	3.4	6 32
Jan. 1929	5¼-5½	4¾-5	4.66	3 59	7 05
June 1929	6	5½	4 80	3 71	7 7
Jan. 1930	4¾-5	3¾-4	3 39	3 57	4 64
June 1930	3¾-3¾	1¾-2¾	1 89	3 37	2 62
Jan. 1931	2¾-3	1¾-1¾	1 24	3 33	1 57
June 1931	2	¾	41	3 32	1 5
Jan. 1932	3¾-4	2¾-3	2 48	4 27	2 65
June 1932	2½-3	¾	34	3.78	2 5
Jan. 1933	1¼-1½	¼- ¾	07	3 39	1 0
June 1933	1½-2	¾	07	3.40	1 0
Jan. 1934	1¼-1½	½	67	3 5	1 0
June 1934	¾-1	¼- ¼	07	2 9	1 0
Jan. 1935	¾-1	¾	14	2 8	1 0

* As reported in the *Federal Reserve Bulletin*.

serves is subject to limitation. The tremendous expansion of governmental funded debt during the War furnished an abundant supply of government bonds for investment by banks. The rapid growth of short-term government borrowing in the years 1932 to 1936 has provided a huge volume of treasury bills, notes, and certificates of indebtedness, as shown in Table VI.

TABLE VI

UNITED STATES GOVERNMENT INTEREST-BEARING DEBT *

(In Millions of Dollars)

<i>Date</i>	<i>Bonds</i>	<i>Notes</i>	<i>Certificates</i>	<i>Bills</i>
Jan. 1932	14,307	795	1,839	575
Jan. 1933	14,230	3,298	2,285	641
Sept. 1933	15,074	5,151	1,495	952
April 1934	15,718	6,689	1,814	1,378
Jan. 1935	16,250	9,585	163	1,954
Jan. 1936	14,688	12,272	254	2,404
Jan. 1937	20,597	10,847	125	2,253

* As reported in the *Federal Reserve Bulletin*.

The variations in the volume of bankers' acceptances and open-market commercial paper available for use as secondary reserves are illustrated in Table VII

TABLE VII
COMMERCIAL PAPER AND BANKERS' ACCEPTANCES OUTSTANDING
(In Millions of Dollars)

<i>Date</i>	<i>Commercial Paper</i>	<i>Bankers' Acceptances</i>
1925 Jan.	819	834
June	759	607
1926 Jan	654	788
June	652	621
1927 Jan	550	773
June	579	751
1928 Jan	577	1,058
June	503	1,026
1929 Jan	407	1,279
June	274	1,113
1930 Jan	401	1,693
June	527	1,305
1931 Jan	327	1,520
June	292	1,368
1932 Jan	108	961
June	103	747
1933 Jan	85	707
June	73	687
1934 Jan	108	771
June	151	534
1935 Jan	171	516
June	159	343
1936 Jan.	178	384
June	169	331

In June, 1931, the total deposits of the banks of the United States were \$51,782,000,000. At this time, the combined volume of bankers' acceptances and open-market paper outstanding amounted to \$1,660,000,000, or approximately 3 per cent of the total deposits. In December, 1932, total bank deposits were \$41,643,000,000 while bankers' acceptances and open-market commercial paper amounted to about \$792,000,000, or somewhat less than 2 per cent. It is evident that banks in general would find it quite impossible under such circumstances to acquire secondary reserves consisting of bankers' acceptances and open-market commercial paper

in any very substantial volume. The difficulties involved in the use of bankers' acceptances and commercial paper by the smaller banks became greater during the depression, as can readily be seen when one considers that although in January, 1930, the bankers' acceptances available for such banks (non-accepting banks) amounted to \$653,000,000, and commercial paper amounted to \$404,000,000, or a combined total of \$1,057,000,000, by January, 1933, the combined total had fallen to \$111,000,000.

CHAPTER IX

LOANS AND DISCOUNTS

After proper provision has been made for secondary reserves adequate to care for all normal seasonal, cyclical, and irregular variations in deposits, plus some margin of safety, the remaining funds may properly be invested in assets which are less liquid. Such assets are of primary importance to the bank because they normally yield a higher rate of return than the highly liquid assets comprising the secondary reserve. Moreover, they are necessary to the economic life of the community in which the bank is situated, for local customers' loans normally fall into this category. Although part of these customers' loans are eligible for rediscount at the Federal reserve banks, a large part are for such periods of time and such purposes that they do not give rise to eligible paper. For example, somewhat less than one fifth of the customers' loans of the "country" national banks on December 31, 1931, were eligible for rediscount¹

Types of loans. The loans which the ordinary commercial bank makes to customers fall into two general classes: secured and unsecured. A secured loan is one in which the lender is protected not only by the general ability and willingness of the borrower to repay but also by the pledge of some salable asset which may be sold and of which the returns may be applied to the debt in case it is not paid when due. It follows that collateral given as security for such

¹ Estimated from data given in the *Annual Report of the Comptroller of the Currency*, 1932, p. 473.

loans may take any number of several forms. The most common collateral used to secure bank loans consists of stocks and bonds. Another type, commodity collateral, is made up of documents of title to marketable goods, warehouse receipts, negotiable bills of lading, and trust receipts. A third type of collateral is made up of claims to personal and real property in the form of chattel and real estate mortgages. These three constitute the most important forms of collateral, but there are also other types in use. The cash surrender value of life insurance policies may be pledged as security for loans, as may notes receivable or, occasionally, accounts receivable.

Loans on Stocks and Bonds

If savings banks are excluded, one may say that stocks and bonds furnish the most important type of collateral used to secure bank loans. On June 30, 1936, loans of all member banks secured by stocks and bonds amounted to \$4,208,000,000, as compared with loans secured by real estate amounting to \$2,340,000,000 and "other loans," including loans on other forms of collateral as well as unsecured loans, of \$5,858,000,000.²

Borrowers on stocks and bonds fall into three classes: (1) those borrowing to finance trading in securities, such as brokers, dealers, and speculators; (2) businessmen who find it desirable to borrow on collateral instead of upon their own unsecured notes for current business needs; and (3) consumer borrowers who have to finance some current need and have available collateral.

Loans for security trading. The borrowers who use funds to finance trading in securities are of two types. There is, first, the investment banking house, which borrows from commercial banks on the collateral of securities owned by the borrower and in process of being distributed into

² On December 31, 1929, loans on stocks and bonds were over \$10,000,000,000, as compared with \$3,191,000,000 in loans on real estate and \$12,000,000,000 in other loans.

TABLE VIII

CLASSIFICATION OF MEMBER BANK LOANS 1928-1935

(In Millions of Dollars)

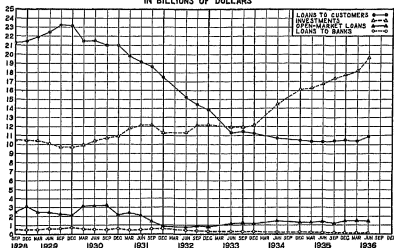
Date	Total Loans and Investments	Loans to Banks	Secured by Stocks and Bonds	LOANS TO CUSTOMERS			—OPEN MARKET LOANS—		
				Real Estate	Other	Other Loans	Commercial Paper,	To Non- Bank Institutions	Invest- ments
				Farm	Other				
Dec. '28	35,684	538	7,348	412	2,711	10,991	602	2,556	10,529
Dec. '29	35,934	714	8,488	388	2,803	11,515	583	1,660	9,784
Dec. '30	34,860	631	7,941	387	2,847	9,831	736	1,498	10,989
Dec. '31	30,575	790	6,290	359	2,678	8,242	327	575	11,314
Dec. '32	27,469	444	4,849	356	2,505	6,195	498	357	12,266
Dec. '33	25,222	287	3,772	318	2,041	5,185	392	840	12,386
Dec. '34	28,150	155	3,397	262	2,012	4,940	419	843	16,122
Dec. '35	29,985	98	3,089	2,284		5,170	482	1,047	17,810
Dec. '36	33,000	85	3,051	2,405		6,172	503	1,144	19,640
Mar. '37	32,525	99	3,074	2,440		6,348	578	1,159	18,826
June '37	32,710	113	3,092	2,505		6,764	523	1,279	18,432

* Includes loans to dealers in securities.

investors' hands. The amount of borrowing for such purposes will vary with the location of the bank, the nature of its clientele, and the state of the investment market. The large city banker will be called upon for such loans if current security flotations exceed the capacity of the investment bankers' own capital. The banks located outside of

LOANS AND INVESTMENTS OF MEMBER BANKS

IN BILLIONS OF DOLLARS



Loans and Investments of Member Banks

the financial centers will have little, if any, loans of this kind.

Second, there is the numerically much more important class of borrowers composed of brokers and speculators. The magnitude of brokers' loans in general during times of acute speculation is shown by the fact that such loans were in excess of \$9,000,000,000 in October, 1929.³ At the end of 1930, when a large reduction had taken place in brokers' loans, the percentage of brokers' loans to all security

³ "Operation of the National and Federal Reserve Banking Systems," *Hearings before a Subcommittee of the Committee on Banking and Currency, United States Senate, 72d Cong., 1st sess., S Res. 71, p 1021.*

loans for different types of member banks was as follows: ⁴

New York City banks	41
Chicago banks	34
Banks in other reserve cities	14
Country banks	5

These figures indicate that banks of the large cities make a larger fraction of their security loans to brokers than do those of smaller cities. The latter lend directly to customers on collateral, both for speculative and nonspeculative purposes.

Some idea of the distribution of security loans among the different types of borrowers may be obtained from analyzing the figures reported by banks in answer to questionnaires sent out by the Senate Subcommittee in charge of the hearings on S. Res. 71, 1931. At the end of 1930 the security loans for ten reporting New York City banks and twenty reporting banks located outside of the city were distributed as follows: ⁵

SECURITY LOANS

	<i>For Commercial, Industrial, and Agricultural Use</i>	<i>For the Sole Purpose of Carrying Securities</i>	<i>For Other Purposes</i>
New York City	19 1%	73 1%	7 8%
Outside New York City	18 0	74 4	7 6

In addition to making security loans to brokers, dealers, and others in order to finance the carrying of and speculating in stocks and bonds, banks frequently make such loans to individuals desiring to make investments. Such borrowers find it feasible to purchase more securities than they can pay for at the moment, borrowing the difference from the bank and using the purchased securities as collateral for the loan. Repayment is then made out of the borrower's income.

⁴ *Ibid.*, p. 1023.

⁵ *Ibid.*, p. 1012. These figures were computed from the answers of individual banks to a questionnaire submitted to them by the committee.

Commercial loans secured by stocks and bonds. Businessmen frequently find it desirable to use securities as collateral for loans intended for business purposes. Probably the banker prefers to obtain collateral for any loan. His ability to lend without collateral arises from the fact that his knowledge of the borrower's financial condition and general credit standing is quite complete. Complete knowledge requires long acquaintanceship, careful investigation, or both. The offering of suitable stocks-and-bonds collateral reduces the need for investigation of the credit standing of the borrower and smooths the way to the loan agreement. It is not surprising to find, therefore, that commercial loans sometimes appear as security loans. The figures appearing in the above table show that at the end of 1930, 19 per cent of all the security loans of New York City banks were really commercial in character, while 18 per cent of security loans of twenty banks in various parts of the country outside of New York City were commercial. The reasons for the use of collateral for commercial loans may be briefly summarized as follows:

1. The borrower may have a poor credit rating and must furnish collateral to get the loan.
2. The use of adequate security collateral may reduce the rate of interest charged by the bank.
3. The use of collateral may increase the size of the loan available by avoiding the legal restrictions on size of loans to one borrower. For example, loans secured by United States obligations are subject to a limitation of 15 per cent of the bank's capital and surplus, in addition to the 10 per cent limit on loans to one individual or firm.⁶

Although the problem of analyzing the borrower's credit standing is avoided in cases of properly margined security loans, such loans present certain other problems. The collateral offered must be marketable and of a value sufficiently above the amount of the loan to assure the bank that it

⁶ *Revised Statutes, Section 5200.*

will not be caught in a falling market. This in turn requires that the collateral be regularly and carefully scrutinized and that any decline in the margin of market value of the securities over the face of the loan be promptly made up. This task is assumed by the New York City banks in making loans for their country correspondents on the stock exchange. Before 1929 they normally made a charge for their services of 5 per cent of the interest earned. During that year, while the Federal Reserve Board was attempting to slow down the speculative tempo of the stock market, the commission charged for such loans was changed to $\frac{1}{2}$ per cent per annum.⁷ Adequate margins are more likely to be maintained against brokers' loans than against collateral loans to customers. Since the broker is liable for the repayment of funds advanced to speculators, he is more likely to be prompt and insistent in demanding proper additions to collateral than will be the bank in dealing with its own customers. Hence it may be said that, other things being equal, brokers' loans are the safest of all collateral loans to finance trading in speculative securities. On the other extreme have been loans to security company affiliates engaged in underwriting security issues. Naturally the bank is tempted to be dangerously easygoing in its attitude toward the margin requirements of such loans. If the collateral offered by the borrower is not easily marketable, but consists of securities of local enterprises, the banker must consider not only the soundness of the collateral but also the credit standing and ability of the borrower to repay; otherwise the bank may easily find itself an unwilling participant in the ownership of local enterprises.

There is reproduced below a copy of the general collateral agreement signed by those making security loans with the Bankers Trust Company of New York.⁸

⁷ During the depression the charge was lowered to $\frac{1}{4}$ per cent per annum, but later became $\frac{1}{2}$ per cent again. *New York Times*, October 26, 1935.

⁸ "Stock Exchange Practices," *Hearings before the Committee on Banking and Currency, United States Senate, 72d Cong., S. Res. 84, Appendix to Pts. 1, 2, and 3, pp. 134-135.*

LIABILITY AGREEMENT

KNOW ALL MEN BY THESE PRESENTS, That the undersigned, in consideration of financial accommodations given or to be given or continued to the undersigned by or through Bankers Trust Co., of the city of New York (hereinafter, whether referred to as agent or otherwise, being called the "company"), hereby agrees with the company, for its own account and as agent for every other person to whom, and firm or corporation, to which the undersigned is or may become indebted by reason of any transaction through the company as such agent or by reason of any assignment by the company of all or any part of any indebtedness of the undersigned, that whenever the undersigned shall become or remain directly or contingently so indebted in any manner whatsoever, the company shall then and thereafter, for its own account and as agent for each such other creditor, have the following rights in addition to those created by the circumstances from which such indebtedness may arise, against the undersigned or the executors, administrators, successors, and assigns of the undersigned, namely

1 All securities now or hereafter deposited by or for the account of the undersigned with the company as collateral to any such loan or indebtedness of the undersigned to the company and/or other creditor, shall also be held by the company as security for any other such liability or liabilities of the undersigned, whether existing or thereafter contracted or existing, due or to become due, or to be held by the company for its own account and/or as agent, and the company shall also have a lien upon any balance of the deposit account of the undersigned with the company existing from time to time, and upon all property and securities of every description now or hereafter given unto, or left in the possession or custody of the company for safekeeping or otherwise, by or for the account of the undersigned or in which the undersigned may have any interest (all remittances and property to be deemed left with the company as soon as put in transit to it by mail or carrier) as security for any such liability or liabilities

2 The undersigned shall deliver to the company additional collateral satisfactory to it whenever called for by it, so that there will at all times be with the company a margin of security satisfactory to it for all such liabilities of the undersigned now existing or which may hereafter be contracted or existing, due or to become due, or held, or to be held by the company for its own account and/or as agent, and in case of failure so to do

forthwith all such liabilities of the undersigned shall become at once due and payable at the option of the company, notwithstanding any credit or time allowed to the undersigned by any instrument evidencing any of the said liabilities or otherwise.

3. The company is hereby authorized and empowered at its option at any time and from time to time to appropriate and apply to the payment and extinguishment of any such liabilities of the undersigned, whether or not existing or hereafter contracted, any and all moneys or other property or proceeds thereof now or hereafter in the hands of the company on deposit or otherwise, for the account of, to the credit of, or belonging to the undersigned, whether such liabilities are then due or not due. In the event of the insolvency of, or the appointment of a receiver of the property of, or an assignment for the benefit of creditors of, the undersigned, or the filing by the undersigned of a voluntary petition in bankruptcy, or the filing of an involuntary petition in bankruptcy against the undersigned, or any attachment against the credit or property of the undersigned with the company, all such liabilities of the undersigned shall, at the option of the company, become and be immediately due and payable without demand of payment.

4. Upon failure of the undersigned either to pay any indebtedness to the company and/or to any other creditor when becoming or made due, or to keep up the margin of collateral securities above provided for, then, and in either event the company is authorized immediately to sell, assign, and deliver the whole of said securities so held by it, or from time to time any part thereof, or any substitutes therefor, or any additions therefor, or any additions thereto at any brokers' board, or at public or private sale, for cash, upon credit, or for future delivery, all at the option of the company, without either advertisement or notice, which are hereby expressly waived, and to apply the net proceeds thereof to one or more or all of such liabilities of the undersigned, whether then due or not. Upon any sale or sales at public auction or brokers' board, or exchange above provided for, the company may bid for and/or purchase the whole or any part of said securities or property, free from any right of redemption, which is hereby waived and released.

5. All securities deposited by the undersigned with the company as collateral to any such liabilities of the undersigned may be pledged by the company, either alone or mingled with other securities, to the United States or to the Federal reserve bank, to secure deposits or other obligations of the company, whether

or not such liability of the company be in excess of such liabilities of the undersigned

6 Calls for collateral or any notices to the undersigned may be made or given by the company by leaving or mailing same to the address given below or the last known address of the undersigned, with the same effect as if delivered to the undersigned in person.

It is further agreed that these presents constitute a continuous agreement, applying to any and all future as well as to existing transactions between the undersigned and the company for its own account and/or the account of any other person, firm, or corporation.

Dated, New York, N. Y., day of , 19

Address

Witness:

Loans on Commodity Collateral

For reasons similar to those which make borrowing on stocks and bonds advantageous to businessmen and firms which are in a position to utilize them, it is frequently desirable for borrowers to furnish commodity collateral. The extent of the use of such collateral can be seen from Table IX.

TABLE IX

LOANS OF NATIONAL BANKS SECURED BY PERSONAL SECURITIES OTHER THAN STOCKS AND BONDS, AND INCLUDING MERCHANDISE, WAREHOUSE RECEIPTS, ETC *

(In Thousands of Dollars)

June 30, 1915	\$882,752	or	13.5%	of total loans
" 1916	884,977	"	11.5	"
" 1917	1,073,842	"	11.9	"
" 1918	1,260,122	"	12.4	"
" 1919	1,331,350	"	12.5	"
" 1920	1,782,399	"	13.9	"
" 1921	1,662,717	"	13.8	"
" 1922	1,383,017	"	12.2	"
" 1923	1,387,363	"	11.7	"
" 1924	1,350,764	"	11.2	"
" 1925	1,363,316	"	10.7	"
" 1926	1,458,026	"	10.8	"

* *Report of the Comptroller of the Currency*, 1926, p. 405. The above figures do not represent exactly the volume of loans secured by commodities, since other personal security is included. However, the bulk is commodity collateral.

Basic commodities used as collateral. Although commodity collateral may consist of warehouse receipts, bills of lading, or trust receipts, the underlying commodities are of great variety. Originally they included only such staples as grain, cotton, wool, and meat produce, which were easily graded and stored. With the modern improvements in the art of cold storage, a vast array of commodities can be stored, and the warehouse receipts against them may appear as collateral for bank loans. We now have grain in elevators, whiskey, tobacco, silks, tea, cotton, butter, eggs, fruits of all kinds, raisins, nuts, vegetables, fish, wool, carpets, and rugs, to mention a few of the types used.⁹ To make the use of warehouse receipts more available to manufacturers and other businessmen who are unable to put their staple raw materials in storage in some bonded warehouse located elsewhere than the borrower's place of business, public warehousemen are now employing field or branch warehouses at the plant of the manufacturer. Complete custody of commodities used for collateral for loans is given to these branch warehouses.¹⁰

Problems of commodity collateral. Like loans secured by stocks and bonds, commodity collateral loans present the problems of marketability and value. If the underlying commodities are regularly traded in on organized exchanges, there is the advantage of assured marketability as well as opportunity to keep close check upon changes in market value. But many commodities on which warehouse receipts are issued and offered as collateral for banks are not dealt in on regular exchanges. Their marketability depends, often, upon a relatively narrow range of buyers. Under such circumstances the lending banker must rely not only upon a wide margin of collateral but also upon the borrower's general credit standing and the probability that the

⁹ Phillips, Chester A., *Bank Credit*, 1920, p. 227.

¹⁰ Gibson, A. T., "Warehouse Receipts," *American Bankers Association Journal*, October, 1932, Vol. 25, p. 27. See also "Field Warehouse Receipts," *Federal Reserve Bulletin*, June, 1937, pp. 513-521.

collateral will in due time be turned into income. Although not so satisfactory as a loan on more staple articles, loans on the less marketable forms of commodity collateral have the obvious advantage over unsecured loans in that they give the lender a prior claim on certain specific valuable assets in case of bankruptcy. Collateral notes of all kinds ordinarily contain a power of sale in case of default or bankruptcy.

Regardless of whether or not the commodity involved is readily marketable, there remains the question of the actual existence of the commodity of the quality and in the amounts called for by the documents of title. If the warehouseman is negligent or dishonest, the receipt may call for more goods than are actually in storage. The use of bills of lading carries with it the risk that the "shipper's count" relied upon by the carrier may be inflated or that the goods may be of inferior quality. With use of both warehouse receipts and bills of lading, there is the possibility that duplicate documents will be issued which are not plainly distinguished from the original genuine one. It is evident that a successful use of commodity collateral requires reliable and financially responsible warehousemen, plus some reliance upon the integrity and solvency of the borrower. The Uniform Warehouse Receipts Act adopted by many states and the United States Warehouse Act have been useful in clarifying and standardizing warehouse receipts, and in the case of agricultural commodities, in insuring honest grading and financial responsibility on the part of the warehousemen.

Finally, there is the trust receipt, a document frequently used to protect the bank when it becomes necessary to release the goods called for by the warehouse receipt or bill of lading in order that the borrower may utilize or dispose of them. At such a time the borrower signs a "trust receipt," which acknowledges the receipt of the goods and states the use to be made of them. The borrower agrees to hold the goods in trust for the bank and on their dis-

posals to deliver the proceeds to the bank. As far as the borrower is concerned, the trust receipt is an effective instrument for the protection of the banker. The courts have no difficulty in finding that, as between the two, the banker is entitled to possession of either the goods or the proceeds. Any action of the debtor in violation of his agreement in the trust receipt would make him liable to the banker as well as answerable to the state for misapplication of funds. However, in case the debtor has disposed of the goods and at the same time is insolvent, the banker cannot retake the goods from an innocent buyer.¹¹

The Unsecured Loan

A great number of business firms do not include in their inventory many, if any, commodities which can be put into independent warehouses and used as collateral. As a result, they are unable to offer commodity collateral as security for bank loans, yet normally such firms are not supplied with stocks and bonds for use as collateral. A large part of commercial loans, therefore, must be made without the pledge of any specific collateral. The relative importance of unsecured bank loans is shown in Table VIII on page 114.

Trade paper. One type of unsecured loan takes the form of discounted or purchased trade paper owned by the borrower. Such paper consists of trade acceptances and promissory notes. By his indorsement the borrower assumes a contingent liability to pay the instrument on notice of dishonor by the primary obligor on proper presentment. Trade paper thus bears two signatures and is designated as two-name paper. The discounting bank, therefore, gets the specific promise of the buyer of goods, in addition to the indorsement of the seller-borrower. The selling and credit policies of American business are such that two-name paper of this kind is relatively scarce. Although at one

¹¹ Spencer, William H., *Textbook on Law and Business*, 1929, p. 733. Edwards, George W., *Principles of Banking and Finance*, 1932, pp. 63-64.

time a common practice, the sale of goods on credit by the use of notes receivable is now confined to the selling of such things as lumber, jewelry, pianos, plumbers' supplies, and agricultural implements.¹² Likewise, the trade acceptance is used but little, most firms preferring for one reason or another to stick to the usual method of selling on open account. This has been true in spite of the efforts of the Federal Reserve Board to promote its use by granting it a preferential rediscount rate during the early years of the Federal Reserve System.

The trade acceptance. The use of the trade acceptance has been the subject of considerable debate. Its champions hold that its use would be of advantage to the buyers and sellers of merchandise as well as to the bank called upon to finance the transactions. A good account of the several viewpoints on the subject is given by the Federal Reserve Bank of Richmond in its letter on "Trade Acceptances," a quotation from which is given below.¹³

CHANGES IN PRACTICE INVOLVED IN THE USE OF THE TRADE ACCEPTANCE

Before passing to the consideration of the advantages and disadvantages of the use of the trade acceptance which were urged in the campaign to which we have already referred, the student should have clearly in mind a picture of previous (and to a large extent present) practices in this country as contrasted with the proposed practice

When a manufacturer or wholesale dealer sells to a jobber or retail dealer the goods are usually shipped on open bills of lading, and the account of the buyer is charged on the books of the seller at the agreed prices, less the trade discount, if such a discount is allowed. At or about the time of the sale (or possibly the shipment) the seller sends to the buyer an itemized invoice of the goods, and upon this invoice is written or printed the terms of the sale. That is to say, the invoice shows the length of time in which the buyer has to pay and the cash discount which will

¹² Phillips, *op. cit.*, p. 169

¹³ Quoted with the permission of the Federal Reserve Bank of Richmond, from "Trade Acceptances," *Letter No. 11*, 1923.

be allowed by the seller if payment is made within a shorter time (frequently ten days). The claim remains an open account on the books of the seller until it falls due and is paid by the buyer, whose duty it is to remit at the maturity of the account, unless, of course, the buyer anticipates this maturity by remitting (less the cash discount) on or before the discount date named in the invoice.

If in the meantime the seller finds it necessary to borrow money with which to meet his obligations he goes to his bank, presents a note for the amount he wishes to obtain, and borrows from the bank on the strength of his statement of assets and liabilities, including among his assets his customers' unpaid accounts (accounts receivable) which accounts are made up of sales some of which have matured and some of which have not.

In case the trade acceptance plan is made use of the sale and shipment will be made in exactly the same way. The invoice will be sent as usual to the purchaser, but with it would go a draft drawn on the purchaser by the seller dated on the day of sale (or the day of shipment) and payable one, two, three, or four months after date, according to the terms of the sale. The invoice could indicate the discount terms just as in the former case, but the purchaser would be requested to accept the draft by writing his name across the face of it and to return it to the seller, unless he should decide to take advantage of the cash discount terms and remit for the net amount of the bill within the time (frequently ten days) specified. In such a case he would of course destroy the draft or return it without acceptance to the seller. It is manifest that in this case the seller instead of having an open account against the purchaser would hold an accepted draft. It is also manifest that in going to his bank for a loan, he could give it one or more of these accepted drafts, instead of executing his own note for the amount he wished to borrow. It is also manifest that in discounting these acceptances (instead of the note of the seller) the bank would have the security of two names instead of one.

* * * * *

THE TRADE ACCEPTANCE FROM THE STANDPOINT OF THE BANKER—ADVANTAGES

1st—In discounting trade acceptances for the seller, instead of his single-name paper, the banker will obtain two names instead of one.

2nd—Not only will the banker obtain the added security of a second name, but the borrower who uses trade acceptances with his banker, instead of his own note issued on the strength of his statement of assets and liabilities, is not in a position to hypothecate his open accounts to some one else, because his open accounts have been merged in the trade acceptances upon which he borrows directly.

3rd—The banker who discounts trade acceptances for his customers is in a position to pass judgment upon the credit risks taken by his customers in selling goods on time.

4th—In any case in which the banker's customer is not strong in himself the banker can minimize the risk by selecting the acceptances of reliable customers of his customer, and in this way he can afford to extend a more liberal line of credit than would be justifiable on the general credit of his customer as shown by the customer's statement.

5th—In making advances to customers on trade acceptances the banker can assure himself that the advances are being used by his customer exclusively in the customer's business. He can therefore afford to extend a more liberal line of credit during his customer's full season, knowing that the line (represented by trade acceptances) will automatically decrease with the ebb-tide of the customer's business. Other things being equal the prudent banker is always willing to extend a much larger line of credit to a borrower who periodically pays out entirely than to another borrower who is indebted to the bank the year around.

6th—The trade acceptance is one of the best forms of investment which the banker can hold, provided, of course, it is taken with due regard to credit risks and business conditions. Trade acceptances drawn in the regular course of business and against actually existing values are more self-liquidating than any other class of commercial or business paper. Not only can the banker discount trade acceptances for any one customer without regard to the legal limitation of 10 per cent of his own capital and surplus, but he can when occasion requires it rediscount such trade acceptances with the Federal reserve bank of which he is a member without regard to the 10 per cent limit fixed by Section 13 of the Federal Reserve Act.

OBJECTIONS FROM THE STANDPOINT OF THE BANKER

It has been thought by some bankers that the discounting of trade acceptances, instead of direct notes, would involve a considerable amount of additional work in the discount department,

for the reason that it takes more time to handle ten or fifteen pieces of paper aggregating a certain amount than it would take to pass through the books a single note for the same amount. This also holds when paper is offered for rediscount to a Federal reserve bank. On the other hand, when the element of additional safety is taken into consideration, as well as the greater ease and greater certainty with which a large percentage at least of the credits could be passed on and the probable saving in attorney's fees, to say nothing of actual losses, the additional cost of the original handling of the items should not be regarded as a controlling factor. In other words, this may be one of the cases in which additional expense in one direction is more than made up by saving in several other directions

* * * * *

In some cases persons have drawn reciprocal acceptances on each other when no goods had passed between them. Although both parties are bound (as drawer or indorser) in each such case, the attachment of the required certificate, "The obligation of the acceptor of this draft arises out of the purchase of goods from the drawer," was clearly fraudulent. In other cases one "trade acceptance" has been given in renewal of another, sometimes for many periods of thirty, sixty, or ninety days each. In such a case, though the sale and delivery of goods may have formed the basis for the original transaction, it can hardly be said that each renewal was a bona fide trade acceptance. It is much more sound reasoning to hold that every renewal, including the first, was an accommodation draft.

The essence of a true trade acceptance is that it shall be drawn by one person on another person and be based upon actual bona fide sale and delivery of goods between the two. Since no man can sell goods to himself, he cannot legitimately draw a trade acceptance on himself. Nevertheless in some cases subsidiary corporations have organized for the purpose of transferring goods from one legal person to another legal person, with the sole object of creating a trade acceptance technically complying with the requirements. Such an instrument, though negotiable in form and apparently meeting all requirements, is not desirable investment for a banker and should be avoided.

* * * * *

There seems to be some misunderstanding on the part of some of the authors who have written on the subject of trade acceptances, which apparently proceeds from their having confused

trade acceptances with bankers' acceptances, at least in some instances. The assertion has been made that trade acceptances have formed a considerable part of the volume of open-market purchases of Federal reserve banks. While trade acceptances, particularly if complying with the Board's regulations with respect to bills of exchange drawn in good faith against actually existing values, are eligible for purchase by Federal reserve banks (while no obligation in the form of a promissory note is so eligible), so far open-market purchases of Federal reserve banks have been confined almost exclusively to bankers' acceptances. Therefore it cannot be said that an open market has been established for trade acceptances on any scale comparable to the open market for bankers' acceptances

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There is another error into which at least some of the authors on trade acceptances have fallen. It is true that under the Negotiable Instruments Act when the drawee of an acceptance accepts it and makes it payable at his bank it becomes in effect an order on the bank to charge the amount to the acceptor's account on the day of maturity, just as though it were a check. Nevertheless trade acceptances, like promissory notes, are not in every respect equivalents of checks. They cannot be charged up to the acceptor's account, unless presented on one certain date, the due date of the acceptance. For this reason, as well as for others, they are of necessity handled by Federal reserve banks as non-cash collections, and the practice is very general, even among member banks, to deduct exchange in remitting for such items. Under these circumstances we have this situation. If the buyer has an open account with the seller and remits his check in payment of the account, the seller can collect the check (unless it is drawn upon a nonmember non-remitting bank) without exchange through the Federal Reserve System. If, however, the debt is in the form of a trade acceptance, it must go forward as a non-cash collection, and the seller of the goods must stand the exchange charge in case the bank of the acceptor elects to charge exchange.

CHAPTER X

LOANS AND DISCOUNTS (CONTINUED)

Accommodation paper. Another form of unsecured loan is that involving accommodation signers and indorsers. The borrower obtains the signature or indorsement of another person as a means of bolstering up his own credit. Such paper results from the indorsement of corporation notes by officers and directors, as well as from the indorsement of the notes of individuals of inadequate credit.

Single-name paper. Finally, there is the single-name unsecured note, which looms large among bank loans. The use of single-name paper arises from the American habit of making credit sales on open account with a heavy discount offered for cash. The heavy cash discount obtainable for payment within ten days furnishes an inducement to the buyer to pay cash, if it is at all possible. If he possesses insufficient funds of his own and his credit standing is sufficiently good, he will borrow on his unsecured note from his local banker. On the other hand, if the buyer is unable to pay cash but waits until the expiration of the full credit period to pay, the seller will obtain funds by borrowing at his bank on his unsecured notes. Thus, in either event, banks will be called upon to finance the transaction on single-name unsecured notes.

In order that a banker may make unsecured loans safely, it is essential that he have complete and accurate information as to the borrower's credit. The methods used in

acquiring such information are varied. The small-town banker tends to rely upon his general acquaintance with the borrower's affairs, supplemented by specific personal inquiries. Larger banks find it impossible to rely upon haphazard credit information and develop more or less elaborate credit departments, whose function it is to gather and record credit information about customers and prospective borrowers¹. The multiplicity of their borrowers, the greater difficulty of measuring the credit standing of complex and large-scale firms, the size of the accommodation required—all make necessary a more complete and orderly assemblage of information than could be had with less formal methods of collection. Moreover, large city banks are frequently called upon by their country correspondents to supply credit information about open-market borrowers.²

Borrowers' statements. Credit information of the more formal sort may be obtained from a variety of sources. There are available for banks as well as others the services of the well-known credit-rating agencies, such as Dun and Bradstreet. There is also the method of direct inquiry from the business houses which have dealings with the individual or firm whose credit standing is being examined. If the borrower has borrowed before at the bank, his record there is available. Finally, there is the direct inquiry from applicants for loans. Foremost in such an inquiry is a request for a statement of assets and liabilities (or balance sheet) and an income statement, preferably certified by a certified public accountant. Supplementing these will be specific inquiries bearing on the borrower's business affairs.

The use of the borrower's statement of assets and liabilities received impetus through the rise of credit departments³ and has been further stimulated by the requirement that

¹ Phillips states that the establishment of credit departments in banks began about 1890. It was after 1900 that their use became common. *Op cit.*, pp. 144-147. See also Prendergast, Wm. A., and Steiner, Wm. H., *Credit and Its Uses*, 1931, p. 93.

² Phillips, *op cit.*, p. 148.

³ *Ibid.*, pp. 145-146.

member banks, when applying for rediscounts, shall certify that statements are on file for all borrowers whose paper is offered for rediscount (except in the case of loans to depositors secured by commodities or United States obligations, or amounting to less than 10 per cent of the bank's paid-in capital and less than \$5,000). Since unsecured commercial loans are made for a relatively short period of time, the banker is vitally concerned with the relation of the borrower's current income to his liabilities. Only when his probable income shows a satisfactory margin over his liabilities, including the proposed loan, will the banker be justified in lending without security. A careful analysis of the borrowers' statements will give the desired information. The items of the balance sheet of most interest to the banker are the current assets and the current liabilities.

<i>Current Assets</i>	<i>Current Liabilities</i>
Cash	Accounts payable
Accounts and notes receivable	Notes payable
Inventory, made up of	Accrued interest on long-time debt
Raw materials	Any long-time debt nearing
Finished goods	maturity
Goods in process	Accrued expenses

The ratio of current assets to current liabilities, called, for convenience, the "current ratio," should show a satisfactory margin of assets over liabilities. What the margin should be in practice depends primarily upon the quality of the current assets and the degree of regularity of income and outgo. The quality of the current assets depends, among other things, upon the following conditions:

1. The general state of business, whether normal or dangerously inflated. This has a direct bearing upon both the marketability of the inventory and the ability to collect the accounts receivable.

2. The freshness of the accounts receivable. If any substantial proportion represent past-due, slow, and uncertain accounts, their value must be discounted. This may be discovered by comparing the volume of accounts receivable

with the volume of sales during the normal credit period just preceding. Since some buyers take cash discounts, the accounts receivable should be less rather than more than the sales for the period.

3. The marketability of the inventory. This is indicated by comparing the present rate of inventory turnover with: (1) the past experience of the company, and (2) the experience of other firms of a similar type. Further, the marketability is affected by the degree to which the product is a staple, subject to a continuous demand. Not only will the banker rely upon an analysis of the borrowers' statements as a means of discovering the true worth of the assets, but he must also check carefully, insofar as possible, on the accuracy of the statements themselves. This may involve an audit of the borrower's accounts either by certified public accountants or by representatives of the bank.

While the banker relies heavily upon the current ratio of the borrower in order to assure repayment of the loan when due, he cannot afford to disregard the question of the long-time solvency of the firm as evidenced by an adequate stockholders' equity. This may not appear so important in the case of short-time loans which are intended to tide the borrower over a seasonal peak. In such cases sufficient protection is afforded by the current assets. But the tendency among some borrowers continuously to obtain part of their working capital from banks alters the situation. In such instances the borrower relies upon his renewing the loan at maturity or, at best, cleaning up his loan at one bank by borrowing at another or in the open market. It is obvious that in such a case the question of the ultimate solvency of the borrower becomes a vital one, for upon it rests his ability either to pay the loan or to shift it to other banks.

The line of credit. In the event that the customer wishes to borrow at intervals during any given season, it is frequently more convenient both for him and for the bank

to make an analysis of his credit and to establish a maximum line of credit which the bank is willing to extend. Thereafter, so long as there is no material alteration in the borrower's condition, he may borrow at any time, without investigation, up to the amount of his credit line. The line of credit imposes no legal obligation upon the bank. It is merely an expression of willingness to lend up to a certain amount if the borrower's credit standing is not impaired and if the bank is in a position to lend at the time when the customer wishes to borrow. Not only does the bank not assume any legal liability to lend, but the customer in no way obligates himself to borrow any or all of the line extended to him. However, the bank incurs a moral obligation to keep open the line if the customer carefully preserves his credit standing, and it could hardly afford to violate the confidence of a valuable customer. If necessary, it may rediscount or borrow funds required to care for the customer's needs. Lines of credit are extended not only to business houses but to correspondent banks as well. Nonmember banks which experience heavy seasonal drains of cash frequently resort to their city correspondent for loans. These loans may be either secured or unsecured.

Banks usually make two requirements of customers for whom they extend a credit line. First, the customer may be expected to clean up his loans at least once a year. This is designed to indicate that the borrower is obtaining funds to care for a seasonal peak in his business. After the need is past, he will pay off his loans. The bank's loans are, therefore, self-liquidating in character. The continuous borrowers, however, can conform to this rule only by borrowing elsewhere in order to pay off the original lending bank. Although loans of this kind are not strictly self-liquidating merely because they are paid off, the bank has the advantage of compelling the borrower to subject his affairs periodically to the scrutiny of other bankers.

A second requirement commonly made by commercial banks in extending a line of credit is that the customer

shall maintain a certain fractional part of the line on deposit with the bank during the life of the credit. This rule is by no means uniformly applied. It is more commonly insisted on in the larger money centers, but is a well-established principle among practical bankers, whether or not actually adhered to.⁴ A variation of the same principle appears in the form of a requirement that a borrowing customer shall maintain a certain fraction of his total loans on deposit during the life of the loan. Still another variation is that any loans made may be only a certain multiple of the average deposit balances carried by the borrower during some preceding period. Some form of the average balance requirement is in common use particularly among metropolitan bankers. Nearly 85 per cent of two hundred six commercial banks located in various clearing house cities engage in the practice. They require from 10 to 20 per cent of an unsecured loan and somewhat less for the secured.⁵

Bankers give several reasons for the "compensating balance" rule. The most frequent reason assigned is that, since a bank cannot lend without deposits, those desiring loans should be required to be depositors also. To this general reason may be added the more specific ones that an adequate balance should be carried by the borrower: (1) to insure the liquidity of his own position and the safety of his business; (2) to reduce the risk to the bank of extending credit; and (3) to make the customer's account profitable to the bank.⁶ Some bankers hold that the maintenance of an adequate balance is the insurance of a supply of credit in times of need. Indeed, it appears that country

⁴ Phillips says that many city banks require borrowers to maintain average balances equal to 20 per cent of the maximum credit extended, while country banks make no such requirement. *Op cit.*, p. 42.

⁵ Whipple, Howard, "The Average Balance Theory Is it Justified?" *American Bankers Association Journal*, May, 1931, p. 902. Also, for a statement that most banks apply the 15 per cent or 20 per cent compensating balance rule, see Hand, John A., "Compensating Balances Should Be Required," *Bankers Magazine*, January, 1932, p. 43.

⁶ Hand, *op cit.*, p. 42.

banks expecting accommodation from their city correspondents carefully maintain their balances with this in mind.⁷

Perhaps the best justification for the practice is that it seems to be profitable to the banks. No doubt it influences to some extent the size of deposit balances carried by customers who expect to borrow from the bank. When applied in the form of limiting loans to some multiple of balances carried in the past, it puts pressure upon borrowers to maintain their deposits constantly at a larger figure than otherwise. This gives the banker more loanable funds, other things being equal, than he would otherwise have. On the other hand, if the rule applied requires borrowers to keep an average deposit equal to 15 or 20 per cent of the loan during its life, it tends to require him to borrow more than he really needs. In either application of the rule the customer *may* be required to carry an abnormally large balance before or during the life of the loan. If so, it has the effect of increasing the cost of the loan. The compensating balance, therefore, results in an overcharge on the part of the bank for the purpose of increasing the bank's income.⁸

The rule has been severely criticized on the grounds that it is illogical, since it is blindly adhered to as a matter of habit, and unfair, since it is not consistently enforced against the stronger borrowers but falls most heavily on the small and weak who, because of their inferior position, are dependent upon a single bank.⁹ Naturally loans or investments made by a banker in the open market cannot give rise to any required balances. This is justified, however, on the grounds that such purchases and loans are made out of surplus funds at times when the bank is not in need of deposits.¹⁰

⁷ Whipple, *op. cit.*, pp. 902, 938.

⁸ *Ibid.*, p. 938. Bradford believes that in practice borrowers carry deposits little, if any, larger than would normally be carried in the absence of the rule. See Bradford, Frederick A., *Banking*, 1932, first edition, pp. 254-256. Insofar as the practice increases the cost of loans, it enables banks to evade usury laws.

⁹ Whipple, *op. cit.*

¹⁰ Hand, *op. cit.*

The extension of credit by banks was criticized during the depression (1930 to 1933) on the grounds that solvent borrowers were unable to obtain adequate loans. This arose in large part from the frantic efforts of banks to fortify themselves against runs by maintaining a high degree of liquidity. Some critics, however, hold that the banks have been using faulty and antiquated methods of credit analysis. More particularly, they contend that bankers have put too much emphasis upon current ratios and too little upon the long-run financial record of the concern as indicated by a satisfactory, growing, owners' equity. They criticize the weight given to past records of deposit balances of applicants for loans. They contend that the banker should become more familiar not only with the production technique and marketing programs, but also with the trend of the borrower's industry as a whole and its relation to other industries.¹¹

Real Estate Loans

The place of real estate loans in bank portfolios. The much-maligned real estate loan ranks high among the secured loans of the banking system. Since 1928 they have made up approximately 9 per cent of the total loans and investments of all member banks. Among the banks other than national in 1932, loans on real estate security were 28 per cent of total loans and investments.¹² Even the national banks at this time reported such loans to the amount of 9 per cent of their loans and investments.¹³ The bulk

¹¹ Criticisms of the credit analysis methods of banks made by business firms experiencing no bank credit difficulty. National Industrial Conference Board, *Availability of Bank Credit*, 1932, pp. 136-138.

¹² Computed from reports of the condition of banks, given in the *Annual Report of the Comptroller of the Currency*, 1932, pp. 546-547. Actually the total of such loans is greater than the amount reported, since eleven states did not report real estate loans separately, hence the actual loans on real estate in those states were not included.

¹³ *Ibid.*, p. 555. The importance of real estate loans developed rapidly after amendments to the law in 1927 enlarged the powers of national banks to allow them to make loans on city real estate for five years instead of one year, as from 1914 to 1927. In 1926 the real estate loans of national banks were only 3.7 per cent of loans and investments.

of bank loans on real estate has been made on urban rather than on farm property. Only 5 per cent of the reported real estate loans of all banks in the United States was on farms, and in only thirteen states are the loans of national banks on farms in excess of those on city property.¹⁴

The popularity of city real estate as a basis for loans can be explained in no small measure by the concentration of a large volume of savings deposits in the larger towns and cities. The boom in city construction following the War gave the city banks with substantial savings deposits an attractive outlet for their funds. The attractiveness of real estate loans was due not only to the favorable rates which such loans tend to yield, but also to certain collateral advantages which exist. More specifically, a bank in a position to make loans on city real estate has been able not only to invest its funds at profitable rates, but also to earn a substantial amount in the way of fees for investigating the security and making the loan. Moreover, these fees may be earned many times on the basis of a given investment through the expedient of reselling the real estate mortgage to depositor-customers who wish to invest accumulated savings after interest-paying dates. This process of resale is facilitated, in the case of larger loans, by putting the mortgage held as security in trust and issuing real estate bonds against the mortgage in convenient denominations. This arrangement is of advantage in that it makes resale easier by furnishing bonds in sizes attractive to investors and enables the bank to resell without assuming any liability through indorsement. If the bank is able to develop a vigorous sales department, it can "turn" the real estate loan (or bond) inventory several times during the year, collecting fees for making each new loan, in addition to interest.¹⁵ One of the obvious difficulties arising from this

¹⁴ *Ibid.* Those states were Delaware, Louisiana, Illinois, Iowa, North Dakota, South Dakota, Nebraska, Kansas, Wyoming, Montana, Colorado, Idaho, and Utah.

¹⁵ Some banks in Chicago in 1926 reported to the writer that such loans were turned as high as six times in the course of a year.

practice from the standpoint of sound banking was the fact that such profits tended to make the banker careless in the making of the loan, since competition was often keen, and the ready turnover of loans gave him a feeling of false security because of an apparent liquidity dependent upon the ability to resell the real estate bonds. Such liquidity was extremely uncertain, as many city banks discovered to their sorrow. The seductive profits of the stock market boom and later the fall in real estate values and defaults on real estate bonds during the depression reduced this liquidity to zero. At such a time the poorly secured real estate loans in the portfolio of many banks contributed to their undoing.

Mortgage trust certificates. Another development in the making of real estate loans has been the use of mortgage trust certificates. These consist of obligations of the bank specially secured by selected mortgages, which are placed in the hands of a trustee. The purchaser of the certificate receives a rate of interest above that paid by the bank on time deposits, which makes the investment attractive. The security is: (1) the obligation of the bank; and (2) the mortgages pledged with the trustee. If the bank fails, the holder of the certificate is still protected by the mortgages.¹⁰ The bank, although still liable for ultimate payment, is able in this way to free its funds for the purpose of making new loans. The mortgages held in this case continue to be listed among the bank's assets, while the mortgage certificates appear as liabilities.

Should banks make real estate loans? Loans on real estate are often condemned as investments for banks. Such condemnation arises partially from the fact that traditional banking theory, if not practice, holds that commercial banks with demand liabilities should make only short-time self-liquidating loans for commercial purposes. More vital than this theory to practical bankers, however, is the unfortunate

¹⁰ It is entirely possible that dishonest management may substitute worthless for good mortgages held by the trustee unless proper safeguards are provided in the arrangement.

experience of bankers with such loans. During the years preceding the banking holiday of 1933, the collapse of many city banks disclosed the fact that they were heavily loaded down with loans on real estate which were not only unliquid but to a considerable degree without value. Added to this is the fact that in rural districts the banks' holdings of farm mortgages frequently have gone bad. It is small wonder that the real estate loan has been so roundly criticized.

What are the characteristics of such loans? Are they undesirable and unsafe for a bank to make? First, it must be recognized that real estate loans are essentially unliquid. This is not wholly true in view of the provisions for emergency sale of mortgages to the Federal land banks and to the Home Owners' Loan Corporation, yet the loan itself is unliquid, and the possibility of disposing of the mortgages is so uncertain that a banker must consider such loans as a fixed part of his portfolio. He must seek for liquidity elsewhere.

Second, real estate loans frequently have no provision for regular amortization of the principal within the life of the loan. In consequence the principal of a five-year loan, the maximum legal length for a national bank real estate loan before 1935, is very likely to be largely unpaid at maturity, and the borrower must look to a renewal. This may be easy to arrange in times of confidence, but if the sentiment among bankers is bad, renewals may prove difficult. The borrower is thus given inadequate protection. The best protection that can be afforded both the borrower and the banker is a loan policy on the part of the bank which provides for real estate loans arranged as to length and amortization of principal so that they are extinguished when due. This should be coupled with a policy of making such loans in the light of the basic inactive part of the bank's deposit liabilities. A properly operating amortization plan, in addition to being of great benefit to the borrower, introduces a small but certain element of liquidity to the real estate loan portfolio, sufficient to enable the alert banker to alter

the position of his real estate loans from time to time without embarrassment to anyone.

Third, because loans on real estate are normally used to finance the purchase of land and the building of improvements, they are necessarily of remote maturity. This inevitably accentuates the problem of the basic security. Obviously more changes can take place to affect the marketability of goods and services in five or ten years than can occur in six months. The demand for a certain commodity may disappear; a city, town, or a given subdivision may decline because of broad economic changes or purely local developments; or a sharp increase in local property taxes may reduce income. Here is the real problem of real estate loans. To avoid loss, enough care and foresight must be exercised when the loan is made to offset the possible effects of time. The real estate loan, if carefully and intelligently made with an ample margin of security, can be a valuable part of the bank's portfolio. But to be successful, the lender must measure long-time trends of industries and localities to a greater degree than must the short-time lender. It is insufficient to lay down a rule of 50 per cent of the appraised value of the property, unless the appraisal goes beyond the temporary conditions existing at the moment when the loan is made and accurately takes account of the trend. It is little wonder that real estate loans have come to grief so frequently when made during times of real estate boom, with an eye only to the immediate fees and profits available. That real estate loans can be both safe and profitable is shown by the experience of the mutual savings banks. In 1932, 65 per cent of the loans and investments of the mutual savings banks of the state of New York were loans on real estate¹⁷; yet no savings banks failed in that state between 1911 and 1933.¹⁸

¹⁷ *Annual Report of Comptroller of the Currency*, 1932, pp 534-536

¹⁸ Statement of the Assistant Superintendent of Banking of New York in a personal letter to the writer.

Legal Regulation Affecting Bank Loans

Because competition among banks and the self-interest among bankers cannot be relied on to insure safe lending policies among banks, the legislatures of the various states, as well as Congress, have provided regulations governing bank loans. There are several reasons for this. First, excessive competition has caused the banker to pay high rates of interest on deposits, which in turn stimulate the making of dangerous but high-interest-bearing loans and investments. Second, our unit banking system has brought more personal contact between customer and banker than is likely to exist in the larger and more impersonally managed branch banks of other countries. Hence there is greater danger of granting personal favors to friends, whether warranted or not. Third, our American banking traditions and methods have developed along the lines of American business. The banker is a businessman, and as such normally sees no reason why the funds of the bank should not be at his disposal. In other words, no well-defined professional attitude exists among American bankers.

/ For various reasons, then, it has seemed necessary to attempt control from the outside. The effort is frequently of little effect because of evasion, and because to some extent control has been misguided. It is next to impossible to supervise the banks in such a manner as to prevent violations of the law, as is evidenced by the not infrequent discovery of violations which have been going on for years before bank failures. Moreover, when violations are discovered, the examiners and supervisory authorities sometimes fail to take adequate and prompt measures to terminate them. Yet, it must be said that the great majority of bankers attempt to obey the law and that the legal regulations seriously influence the makeup of bank portfolios.

Limits on loans to one borrower. Perhaps the most common form of regulation of bank loans deals with the size of loans which a bank is permitted to make to any one

borrower. The purpose of such regulation is in part at least to insure some degree of diversification among the bank's loans. When enforced, it tends to give diversification as to individual borrowers, although it quite obviously fails to insure diversification among industries or territories, which is of almost equal importance. Further, it is sometimes said that the rules limiting the size of individual loans are designed to insure that the lending capacity of banks is not monopolized by a few borrowers but is made available for the community at large.¹⁹ Whatever the purpose behind such regulations, they are universally found in American banking laws.

The limitations placed upon the loans of banks to one individual or firm may best be illustrated by the National Banking Act.²⁰ A national bank may lend to any one borrower (including, in the case of partnerships, the obligations of any partner, and in the case of corporations, all subsidiaries in which the corporation has a controlling interest) not more than 10 per cent of its capital and surplus. To this limitation there have been grafted exceptions which ease the burden of the 10 per cent rule. There are excepted altogether from its operation: (1) obligations in the form of drafts and bills of exchange drawn against actually existing values; (2) acceptances of member banks, (3) obligations arising from indorsement and discount of commercial paper owned by the person concerned; and (4) obligations representing loans to banks or receivers or conservators of banks when approved by the comptroller. Partial exceptions are made in the case of: (1) obligations arising from the indorsement and negotiation of noncommercial paper owned by the person negotiating it, for which the limitation is 15 per cent of the bank's capital and surplus, in addition to the 10 per cent; (2) obligations secured by United States obligations or those guaranteed by the United States, for which the limitation is 15 per

¹⁹ Willis, H. Parker, and Edwards, G. W., *Banking and Business*, 1925, p. 139

²⁰ *Revised Statutes*, Section 5200.

cent in addition to the 10 per cent; (3) obligations secured by livestock worth 115 per cent of the loan, on which the limit is 15 per cent, in addition to the 10 per cent; and (4) obligations secured by documents of title to readily marketable nonperishable staples, for which the limit is an additional 15 per cent above the 10 per cent, provided the market value of the staples is not less than 115 per cent of the loan. However, the limit is expanded by 5 per cent of the bank's capital and surplus for each 5 per cent additional margin of collateral, up to a maximum of loans amounting to 50 per cent of the bank's capital and surplus if the collateral is worth 140 per cent of the face of the loan.

The exceptions which have been grafted on to the original rule in large measure constitute concessions to the national banks in order that they might more easily meet the competition of state banks, for which the rules are generally more lenient. The whole rule has been criticized as cumbersome and unsatisfactory. It reduces the ability of the smaller banks to attract and keep the loan accounts of the commercial and industrial concerns which are unable to obtain adequate credit accommodation under the 10 per cent rule applying to all straight single-name commercial paper loans. These better borrowers in many smaller cities are compelled to resort to the open market for commercial paper or to the larger banks in the financial centers. Thus many banks are deprived of their best possible borrowers by the rule. To offset this, they must either buy commercial paper at low rates in the open market, if available, or lend to less desirable borrowers of the community. It seems certain that diversification and safety of loans might be insured more successfully by modification of the rule, particularly as it applies to unsecured paper.²¹ Not only has

²¹ For a good discussion of this, see Bradford, Frederick A., *Banking*, 1932, first edition, pp. 437-441. He suggests that the limit on unsecured single-name paper might well be raised to 20 or 25 per cent of the lending bank's capital and surplus.

this rule tended to deprive smaller bankers of some of their best borrowers but also it has had some influence in the promotion of mergers of banks in order to facilitate the accommodation of the large borrowers.

Loans on a bank's own stock. National banks, like state banks, are prohibited from making loans on the security of their own shares of stock.²²

Real estate loans. Another type of regulation applying to bank loans is that dealing with loans on real estate. The national banks originally were not permitted to make any such loans. They might, however, come into possession of liens on real estate indirectly. Should a loan show signs of weakness, the bank might exact additional protection in the form of a real estate mortgage. It not infrequently happened that such mortgages were acquired through subterfuge, since many national banks have always been desirous of making real estate loans. However, the freedom of most state banks from any prohibition on such loans gave them the upper hand until the National Banking Act was amended (1913) to enable national banks outside of central reserve cities to make loans on real estate. At first they were limited to lending for five years on improved farm land. In 1916, authority was extended to permit the making of one-year loans on improved city property. In 1927, the powers of national banks to make real estate loans were considerably expanded for the purpose of enabling them to compete more successfully with state banks.

Under the Banking Act of 1935, national banks may make first mortgage loans on improved real estate, provided the bank takes the whole loan, without restriction as to location of the mortgaged property. Mortgages may be on farm, business, or residential property. Unamortized loans may be made for periods not to exceed five years, to an amount of not over 50 per cent of the appraised value of the real estate. Loans up to 60 per cent of the appraised value may

²² *Revised Statutes*, Section 5201.

be made for periods of not over ten years, if provision is made for the amortization of at least 40 per cent of the principal within ten years. These limitations do not apply to mortgages insured under the National Housing Act. The total amount of real estate loans may not exceed 100 per cent of the bank's capital and surplus, or 60 per cent of its time and savings deposits, whichever is greater.

Loans to executive officers and affiliate and security loans. New regulations on the loans of member banks were incorporated into the Federal Reserve Act by the amendments of 1933 and 1935.

These are

(1) No executive officer of any member bank shall borrow from any member bank of which he is an executive officer more than \$2,500 and then only upon the approval of a majority vote of all the directors. However, loans by member banks to executive officers in force June 16, 1933, may be renewed where necessary until 1938. Lending to a partnership in which one or more executive officers of a bank hold a controlling interest is under this limitation. Moreover, if an executive officer of a member bank borrows from any other bank, he is required to make a written report of such borrowings to the chairman of the board of directors of his own bank stating the date, the amount, the security for and the purposes of the loan.²³

(2) Member banks are forbidden to advance funds to any one affiliated company, either by making loans, purchasing stocks or bonds, or lending on collateral security of the stocks or bonds of such affiliate, to an amount greater than 10 per cent of the bank's capital and surplus. Total advances to all affiliates is limited to 20 per cent of its capital and surplus.²⁴ Further, loans to affiliates not secured (a) by obligations of the United States Government, the Federal intermediate credit banks, the Federal land banks, the Federal home loan banks, or the Home Owners' Loan Corporation or (b) by paper eligible for purchase or rediscount by the Federal reserve banks, must be secured by collateral of stocks and bonds having a market value at the time of the making of the loan of at least 20 per cent more than the loan. However, if collateral offered consists of the obligations of any state or political subdivision, only 10 per cent margin

²³ Federal Reserve Act, Section 22.

²⁴ *Ibid.*, Section 23-A.

of collateral is required. Affiliates to which these provisions apply do not include corporations holding the bank premises June 16, 1934, engaging in safety deposit business, extending agricultural credit, holding obligations listed above in (a) or engaging in foreign banking.

(3) The Board of Governors of the Federal Reserve System, upon affirmative vote of at least six members, may fix for each Federal reserve district the percentage of individual member bank capital and surplus which may be represented by loans secured by stocks and bonds. Such a percentage shall be subject to change from time to time on ten days' notice and shall be established with a "view to preventing the undue use of bank loans for the speculative carrying of securities." The Board of Governors has an enforcement weapon in the power to suspend all rediscount privileges at the Federal reserve banks for offending member banks which violate its orders.²⁵

Finally, the Securities Exchange Act of 1934, Section 7, provides that the Board of Governors shall prescribe regulations as to the amount of credit that may be extended on any non-exempted security registered on a national securities exchange. This puts into the hands of the Board the control of margin requirements on the bulk of the collateral loans made by banks.²⁶

The foregoing new regulations on the loans of member banks resulted from the disastrous banking developments revealed by the events of the period 1929 to 1933. The restrictions on loans by member banks to their own executive officers is a decidedly healthy one and should materially aid in preventing the too common occurrence of excessive loans to executive officers of banks dominated by one or two men. The limitations on loans to affiliates are designed to prevent a repetition of some of the unfortunate incidents which occurred during the heyday of speculation in 1928 and 1929.

²⁵ *Ibid.*, Section 11, (m).

²⁶ New regulations of the Board of Governors went into operation on May 1, 1936. Under these regulations loans by both banks and brokers for the purpose of purchasing and carrying registered securities are limited to 45 per cent of the market value at the time the loan is made. Banks may lend to brokers up to 60 per cent of the market value. The regulations do not apply to loans for purposes other than for the purchase and carrying of securities.

CHAPTER XI

BANK INVESTMENTS

Volume of investments. Purchased securities, mainly bonds, play an important part in the portfolio of banks. They have been considered desirable bank assets in the past because, first, if readily salable, they are valuable additions to the bank's secondary reserves. Second, they may be purchased at times when the local demand for loans is inadequate to absorb the bank's idle reserves.

Tables X and XI, showing the investments of the national banks at intervals since 1914, and the relative importance of the investments of all member banks since 1928, indicate something of the nature of commercial bank bond-holdings

Beginning with 1914, the investments of national banks were 22.9 per cent of the total loans and investments. They rose to 59.2 per cent in 1935, while for all member banks in 1936, securities were 61 per cent of the loans and investments. The most important single type of investment consisted of United States Government obligations. These became popular partially because of their increased availability during and after the War and partially because of their usefulness as secondary reserve. Banks are permitted to borrow from the Federal reserve banks on their fifteen-day notes, using United States bonds as collateral. Furthermore, these securities always have a ready market. On June 30, 1936, the holdings by member banks of United States obligations made up 42 per cent of total loans and investments.

TABLE X
CLASSIFICATION OF NATIONAL BANK INVESTMENTS*
(In Millions of Dollars)

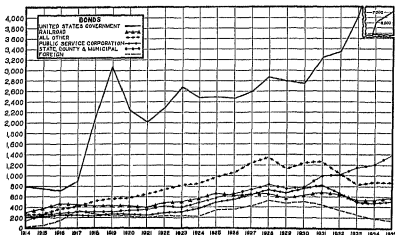
Date	Total	Ratio of Investments to Total Loans and Investments	Total	To Secure Circulation	Ratio of U S Obligations Not Pledged to Secure Circulation to Total Investments	State, County, Municipal	Railway Bonds	Public Service Corporation	Claims and Warrants	Foreign	All Other
June 1914	1,914	22.9%	799	740	3.0%	176	341	218	35	15	328
June 1918	3,957	29.1	2,116	691	36.0	320	406	267	290	283	271
June 1920	4,186	25.2	2,269	706	37.3	338	416	283	328	240	309
June 1922	4,565	28.8	2,285	733	34.0	414	486	318	385	249	423
June 1926	5,842	30.3	2,469	750	29.0	647	631	545	403	372	772
June 1929	6,656	31.0	2,803	666	32.0	757	592	694	120	494	1,100
June 1930	6,888	31.6	2,753	667	33.0	791	660	783	143	527	1,124
June 1931	7,196	36.8	3,256	667	33.0	997	719	828	147	476	1,150
June 1932	7,196	41.1	3,352	669	37.0	1,031	652	684	120	344	918
June 1933	7,371	47.6	4,031	730	44.7	1,162	530	533	266	266	849
June 1934	9,348	54.8	6,003	724	56.4	1,212	529	519	197	197	888
June 1935	10,716	59.2	7,173	225	64.8	1,386	593	536	155	155	873

* Annual Report of the Comptroller of the Currency, 1926, p. 407, 1931, p. 53, 1932, p. 53, 1935, p. 73

Banks as bond buyers. It is frequently said that banks are poor bond buyers. By this is meant that they tend to buy at high prices and sell at low prices, thus taking capital losses which offset the earnings. This is explained in two ways. (1) Banks normally attempt to accommodate their own customers first, since the banker feels a special

INVESTMENTS OF NATIONAL BANKS

IN MILLIONS OF DOLLARS



Investments of National Banks

obligation in this regard. If business is brisk and times are good, the number of sound local borrowers is likely to increase. A shortage of loanable funds tends to force up short-time money rates, which in turn reduces the attraction of fixed interest-bearing bonds to all lenders and investors. Bond prices tend to fall, therefore, just at the time when bankers are likely to be selling securities to obtain funds needed for the accommodation of local borrowers. This sale of securities helps to depress the bond market still more. On the other hand, when business is dull and local demands for funds are few, the banks seek opportunities to invest idle reserves. The prices of bonds at such times are increased, because they provide a more

attractive investment for all money lenders, including the banks. Therefore, the banks are always on the wrong side of the market. (2) A second explanation for the inaptitude of banks as bond buyers is that the motivating factor in the increase or decrease of bond investments is to be found in the changes in the relation of interest on high-grade commercial paper to the yield on bonds¹.

TABLE XI

INVESTMENTS OF ALL MEMBER BANKS*
RATIO IN PERCENTAGE TO TOTAL LOANS AND INVESTMENTS OF

Date	U.S. Obligations (direct and fully guaranteed)	Other Securities	All Securities
Oct 3, 1928	12 5	17 7	30 2
June 29, 1929	11 6	16 5	28 1
June 30, 1930	11 3	17 8	29 1
June 30, 1931	15 7	19 9	35 6
June 30, 1932	20 1	20 6	40 7
June 30, 1933	27 7	20 3	48 0
June 30, 1934	34 6	19 2	53 8
June 30, 1935	39 7	18 8	58 5
June 30, 1936	42 3	18 7	61 0

* Computed from reports in *Federal Reserve Bulletin*

The losses of national banks from such sources during the greater part of their life must have been infinitesimal. From 1880 to 1902, the total bonds not tied up as security for notes or government deposits amounted to less than 8 per cent of the total resources. In addition, these bonds showed no large variation from one season or year to the next. In later years, particularly after the World War, the very substantial bondholdings of the national banks made losses of this kind more probable. But during the period from 1891 to 1934, there are only three years in which the security holdings of national banks actually showed any decline from June 30 of one year to June 30 of the next. The years showing some decline (1920, 1921, and 1929) were years of extraordinary pressure upon the short-time

¹ For a discussion of this point, see Steiner, W. H., *Money and Banking*, 1933, pp. 245-246.

loan market, and the decline in security holdings is thus to be expected. The total decrease in the two years 1920 and 1921 was about 18 per cent of the bondholdings of 1919. The decline of 1929 over 1928 was about 7 per cent. Granted that the yearly figures conceal variations from season to season and that data for all national banks do not disclose what happens to individual banks, the fact still remains that losses realized by banks through the sale of investments during times of increased customer-loan demand are, on the whole, slight. The three years since 1891 when investments were reduced were years characterized by abnormally high short-time money rates, which compensated for losses sustained through the sale of bonds.

This does not mean, however, that bond investments of banks cannot become an important source of loss. On the contrary, losses on security investments may be serious. These losses are caused not so much by the fact that banks are on the wrong side of the market as that they have absorbed quantities of securities of mediocre grade which present attractive rates of earnings but inadequate security. Such bonds have proved to be a serious source of embarrassment to banks, owing both to their weakness under fire of heavy liquidation in times of panic and to their default in times of stress. At such times the banker is in a difficult position in evaluating his securities for the purpose of making up his statement of condition. Furthermore, if it happens that he is compelled to liquidate such bonds to strengthen his reserve position, he makes a heavy sacrifice. Moreover, the pressure on the bond market after 1928 caused the banks heavy inventory losses on bonds of the best grades. Between January, 1929, and April, 1933, the *New York Times* index of average market prices of forty high-grade bonds declined one third. The seriousness of such a depreciation can be visualized by applying it to the investments of the national banks. A decline of 33½ per cent in the market value of national bank investments in

1929 would have wiped out 63 per cent of the stockholders' equity.

Evaluating the bond account. The extreme decline in bond values during the years 1931 and 1932 placed the problem of determining the proper method of evaluating the bond inventory of banks squarely before those who were in charge of bank examination and reports. Several different methods are normally followed by banks in evaluating bonds for purposes of published statements. They are: ²

1. Original cost.
2. Original cost with amortization of premium and accumulation of discounts to maturity.
3. Original cost with reserves against depreciation.
4. Market value, permitting appreciation of some securities to offset the depreciation of others.
5. Cost or market, whichever is lower.

In following any practice other than the evaluation of securities at cost, there arises the problem of determining: (1) what is the proper value of issues having no ready market; and (2) whether or not banks should be compelled to write down the value of securities to the market value so long as they are not in default. If it may be assumed that securities, when acquired, will be held to maturity, a disregard of the market value would seem to be justified. If, however, the bank is forced to rely upon liquidation of securities in times of stress, the market value can hardly be disregarded. The examiners for the Comptroller of the Currency, generally speaking, base their valuations on present market value. The sharp decline in security prices during 1931 made some modification of such a rule imperative if good banks were not to be made to appear insolvent. In September of that year the Comptroller issued instructions

² "Operation of the National and Federal Reserve Systems," *Hearings, Subcommittee of Committee on Banking and Currency, United States Senate, 71st Cong, 3rd sess, S. Res 71, Appendix, Part VII, p 1040.*

to his examiners to classify all the securities of the banks examined into thirteen grades, the classification to be based upon the lowest rating given the bonds by four statistical agencies. Bonds falling into the four highest of the thirteen grades were exempt from a charge-off for depreciation in market value so long as they were not in default. Bonds in the remaining nine grades were to be marked down to their market values by a semiannual charging off of 25 per cent of the depreciation until the full amount had been written off, unless the bond was in actual default, in which case it was to be marked down to its market value at once.³

Liquidity of bond investments. Marketability of a substantial part of a bank's bondholdings is necessary if they are to be a source of liquidity. Among eighteen New York City banks, the percentage of bonds not listed on any security exchange varied from as high as 89, 81, and 74 per cent to as low as 4 and 6 per cent. Only eight of the eighteen held unlisted bonds to an amount of one third or more of the total. Among twenty banks outside of New York City, located in twelve different states, the proportions of unlisted securities varied from as high as 70, 65, and 54 per cent down to 12, 13, 15, and 16 per cent. These banks on the whole carried a larger proportion of listed bonds than did the New York City banks.⁴

Repurchase agreements. Not all bonds reported by banks as a part of their portfolios actually represent investments in the ordinary sense of the term. Some are bought under a repurchase agreement by the seller, who contracts to buy the bonds back at a stated price and at a stated time.⁵ It thus closely resembles a security loan

³ *Ibid.*, p. 1077.

⁴ *Ibid.*, p. 1039.

⁵ Under a new regulation of the Comptroller of the Currency, banks may buy with an option to resell, but the seller cannot have an absolute right or option to repurchase. Likewise, banks may sell with an option to repurchase if the buyer does not have an option to resell. Since these regulations apply to all member banks, such banks are precluded from making such agreements with each other. *Federal Reserve Bulletin*, March, 1936, p. 195.

to the seller. The use of the repurchase agreement, most common in New York City, is explained partially by the fact that it enables banks virtually to lend to one borrower an amount in excess of the statutory limit. Further, the bank's customer obtains the full market value since no margin requirement applies. The bank obtains the coupon rate of interest, and where the bonds are tax exempt (government and municipal bonds being most commonly used), it obtains a tax-exempt income. The bank may be able to reduce the volume of its security loans if it wishes, while the borrower may be able to conceal in its statement of condition what are essentially "bills payable."⁶

Legal regulation of bank investments. Quite naturally, security investments of banks have been influenced by legislation and the rules laid down by examining authorities. Generally speaking, the regulations governing the investments of banks operating under state charter (except savings banks) have been more lenient than those applying to national banks. Although the national banking law made no mention of the right of national banks to invest in other than government bonds, such banks have for many years carried bond investments. Specific legislation regulating the investments of the national banks was provided in amendments passed in 1927, 1933, and 1935. As the law now stands, national banks may:⁷

1. Purchase and sell investment securities for customers without recourse against the bank.

2. Purchase investment securities for their own account, provided the obligations of any one maker shall not exceed 10 per cent of the bank's capital and surplus. No restrictions apply to bonds of the United States or any political subdivisions thereof, or to obligations arising under the

⁶ *Hearings, op cit.*, pp. 1047-1049

⁷ *Revised Statutes*, Section 5136 See also the Federal Reserve Act and Agricultural Credits Act of 1923. State member bank investments are, by the act of 1933, subject to the same regulations as those of national banks.

Federal Farm Loan Act or issued by the Federal Home Loan Banks, the Home Owners' Loan Corporation, or the Federal Housing Administrator when guaranteed by the United States. The Comptroller of the Currency may define "investment securities."³

3. Invest in corporate stocks only as follows:

- (a) They may invest not more than 15 per cent of their capital and surplus in any corporation organized to conduct a safe-deposit business.
- (b) Without special permission of the Comptroller of the Currency, they may invest in bank premises or in stocks and bonds of a corporation holding the premises of the bank not more than the amount of their capital stock.
- (c) They may buy the necessary stock in the Federal reserve banks.
- (d) They may buy stock in banks to engage in foreign banking (limited to 10 per cent of the bank's capital and surplus).
- (e) They may buy stock in National Agricultural Credit Corporations (limited to 10 per cent of the bank's capital and surplus).

³ The regulations by the Comptroller on this point include the following requirements:

- 1. That the issue be of a sufficient size to make marketability possible.
- 2. That such public distribution must exist as to insure marketability, or other existing securities of the issuer must have such public distribution as to insure the marketability of the issue.
- 3. That the issue be registered under the provision of the Securities Act of 1933 unless exempt by law.
- 4. That the trust agreement under which the security is issued provides for an independent trustee who must be a bank or trust company in the case of securities issued after February 27, 1935. These same regulations also apply to state member banks. The Comptroller has issued further regulations forbidding investment in securities "distinctly predominantly speculative" in character. In doubtful cases, evidence of nonspeculative character may be supported by ratings in at least two rating manuals. Also, premiums must be amortized. These regulations on bank investments do not apply to real estate bonds in case the whole issue is taken by one bank. "Regulations of the Comptroller of the Currency," *Federal Reserve Bulletin*, March, 1936.

In view of the unfortunate experiences of banks with their bond accounts during depressions, it seems desirable that some standard of quality of bond investment similar to that required of well-regulated mutual savings banks be set by law for all banks.

Administration of the bond account. The importance of bonds among the assets of banks introduces the vital problem of intelligent purchase. This involves: (1) the question of the general quality of appropriate bonds; (2) the investigation of the proper rating of individual issues the purchase of which is contemplated; and (3) the administration of the bond account once it is set up. It is evident that the bond account involves problems similar in general outline but different in specific details from those of commercial loans. It requires careful and constant analysis of the bond market, which in itself requires a high degree of specialized skill.

In order to avoid the losses which arise from buying bonds when they are expensive and selling when they are cheap, the bond account, except bonds carried for secondary reserve, might be made a permanent part of the bank's portfolio regardless of the ebb and flow of the customer demand for loans. This account should consist mainly of "money bonds" or bonds of the highest grade. The temptation to buy low-grade bonds to increase earnings should be resisted, even in the face of high competitive interest payments on deposits, if losses through default are to be avoided in times of stress.

The problem of choosing high-grade bonds which are of maximum benefit to the bank is a difficult one. Country banks must to a large extent rely upon their city correspondent for advice. The city bank itself must be adequately provided with expert investment officers who can utilize the numerous agencies and services which collect data on companies with bond issues as well as conduct independent investigation of the quality of bonds appearing in the market. Naturally, purchases of bonds must not

be made upon the sole recommendation of the underwriters or bond salesmen.

Once the bonds have been purchased, their standing should be scrutinized at frequent intervals if losses are to be avoided. Moreover, the bond account will show more profit if a sufficient part is in issues which are sufficiently close to maturity to insure an opportunity for disposing of them without loss. This enables the bank to take advantage of changes in the market for bonds. At times, when long-term, high-grade bonds decline in price, the banker in such a position can purchase them on favorable terms. Further, when long-term bonds appear to have reached their peak, the watchful investment officer will dispose of his holdings and acquire shorter maturities less subject to the decline which will accompany higher money rates. In this manner the "cost" of the bonds making up the security account may be kept at a minimum, thus improving the yield.⁹

Losses on bonds and loans. The increase in the importance of bonds as compared with loans among bank assets brings to the fore the question of whether or not it is desirable for banks to advance more funds designed to furnish business enterprises with fixed capital. Some condemn this tendency as contrary to sound commercial banking principles. Others hold that the practice is permissible if the assets representing advances of a fixed nature are shiftable. This point will be discussed in a later chapter. However, one may be sure that realized losses on bond investments have in times of crisis been somewhat higher than on loans, while the rate of earnings has been smaller. This fact is shown by Table XII.

It would seem, then, that if the trend toward more bonds

⁹ For a good discussion of the problem of bond investments for banks, see an article in the *American Bankers Association Journal*, October, 1932, entitled "Investments," by Arthur B. Taylor, Chairman of the Bank Management Commission, American Bankers Association. This article is based upon the results of a survey on bank investments by the commission and has been heavily relied upon in the foregoing discussion.

TABLE XII

EARNINGS AND LOSSES OF MEMBER BANKS ON LOANS AND INVESTMENTS *

Year	Per Cent of Interest on Loans %	Per Cent of Interest on In- vestments %	Per Cent of Losses on Loans	Per Cent of Losses on In- vestments
1926			55%	38%
1927			53	37
1928	5 64	4 69	48	42
1929	6 08	4 69	54	33
1930	5 35	4 52	76	1 04
1931	5 13	3 92	1 41	2 16
1932	5 13	4 01	2 43	2 67
1933†	4 78	3 52	2 86	3 18

* These percentages were computed from data appearing in the *Federal Reserve Bulletin*. The loans and investments used were those for June 30 of each year, except 1928, when the October figures were used.

† Percentages shown for 1933 were based upon earnings and losses for the first six months, computed on an annual basis. For additional evidence as to the relative losses on loans and investments, for the years 1918-1935, see the *Annual Report of the Comptroller of the Currency*, 1935, p. 83.

in bank portfolios continues, more care must be taken to avoid losses. In order to fortify itself against undue losses, the individual bank must: (1) look to the ultimate security of any bonds purchased; (2) be certain of their marketability in order to be able to dispose of holdings that threaten to become undesirable, and (3) hold long-term bonds in such amounts as will not exceed, with other unliquid assets, the volume of deposits that are, by a wide margin, certain of stability. This assumes, of course, that banks are free to decide between making commercial loans and the purchase of bonds, an assumption which may vary from the facts. This point must be reserved for later consideration.

CHAPTER XII

THE BANK'S PORTFOLIO

Requirements of a bank's portfolio. We have considered the various forms which a bank's earning assets may take. These earning assets, as they actually exist in any given bank, make up its portfolio. The portfolio must be arranged with three distinct considerations in mind: (1) liquidity, (2) solvency, and (3) earnings. Without the first, the bank cannot operate and meet depositors' demands. Without the second, it must ultimately fail, with subsequent losses realized by the stockholders and probably by the depositors. Finally, without earnings the banking operations cannot be carried on by private enterprise.

It must be apparent to the thoughtful reader that these three essential requirements placed upon the bank portfolio are not altogether in harmony. True, liquidity implies short-run solvency, to say the least, but it varies inversely with the earning power of assets. Likewise, it is possible to achieve ultimate solvency without liquidity, as is illustrated by the well-secured real estate loan. Finally, earnings are often sought at the expense of both liquidity and solvency. It is evident that, essential as they are, earnings must at all times be made secondary to the requisite liquidity and the solvency of the bank. This must not be construed, however, to mean that bankers should never make a loan or an investment that is less sound than the maximum humanly possible. Such an attitude would be too rigorous for business, which cannot well provide absolute security for its borrowing. But any margin of

speculation in the portfolio should be amply covered by the stockholders' equity.

Obviously, liquidity is the first consideration in organizing the portfolio. Without adequate provision for this, the bank faces certain extinction when the pressure of deposit withdrawals is met. To maintain excessive liquidity is to sacrifice earnings. It is clear that a bank should carry liquid assets in sufficient amount so as to meet (1) the seasonal demands of depositors, which can be forecast in the light of experience;¹ and (2) the cyclical variations in deposits, taking measures to increase the liquidity of the portfolio during times of boom or excessive prosperity. Such action would have the double advantage of protecting the bank and acting as a brake upon speculative excesses which characterize such times. It is probably too much to expect the average banker to anticipate and guard against such cataclysmic disturbances as took place in the banking field from 1930 to 1933, when the loss of confidence in banks by the public caused the complete breakdown of banking functions. The secondary reserve, which has already been studied, is relied upon to provide this liquidity.

After the necessary liquidity has been provided, the remainder of the bank's portfolio may be arranged with an eye to solvency and earnings only. Naturally the particular kind of assets used will depend to a large extent upon the type available. The obligations of industrial firms which are customers of a bank will find their way into the less liquid part of the portfolio. Real estate mortgages will appear in banks which find an insufficient outlet elsewhere. Diversification to some extent may be achieved through investments in bonds.

Self-liquidating loans. The requirement of liquidity and solvency raise the fundamental problem of the appropriate form which bank assets should take. In particular, it raises the question of the importance of self-liquidating paper as

¹ These, of course, vary with the nature of the depositors' requirements and the nature of the deposits, whether thrift or current accounts.

compared with paper that is not self-liquidating. The position of many writers on banking theory is that commercial banks should confine themselves to making loans to finance the short-time current working capital needs of commerce and industry.² These loans have the advantage of being self-liquidating in character and therefore more appropriate for banks with demand liabilities, both because of liquidity and security. This theory holds that commercial banks should avoid making advances to industry to provide fixed capital, leaving such loans to other financial agencies without demand obligations (such as savings banks, investment trusts, and the bond market in general).

In spite of this theory, American banks generally have in practice departed from the exclusive holding of self-liquidating commercial paper. One need but examine the growing importance of securities among bank earning assets to be aware of this fact. Loans on real estate and loans to security dealers, investors, and speculators are for the most part used for fixed capital rather than for temporary working capital purposes. Since this is the trend, it is of little use to bewail the departure from the standards of classical bank theory. We are confronted with an actual situation which appears, with some notable exceptions, to work fairly well in practice.

Let us examine self-liquidating commercial paper and observe its similarities to and differences from other forms of bank loans. Self-liquidating commercial paper arises in connection with a loan to a borrower, who uses the proceeds to increase his working capital. This new working capital, in the normal course of events, will be transformed into salable goods or services which will return to the borrower the funds with which to pay the loan. If the period of the loan is long enough to enable the borrowed capital

² For example, see Willis, H. Parker, Chapman, John M., and Robey, Ralph W., *Contemporary Banking*, 1933, p. 437. See also Waldo F. Mitchell, who quotes numerous writers to a similar effect in an article on "The Liquidity of Bank Earning Assets," *Journal of Political Economy*, 1923, p. 245.

to make the cycle—from money, to working capital, to salable goods, and back to money again—the loan may properly be called self-liquidating. If the period of the loan is too short, it is not self-liquidating. It follows from the above definition that a loan whose proceeds are to be used by the borrower to acquire fixed capital goods might be self-liquidating if the loan were to run for a period of time sufficient for the capital goods to earn back the interest and principal of the loan. A loan on city real estate from 1914 to 1927) is obviously not self-liquidating, yet such a loan of sufficient length, with principal properly amortized, might be self-liquidating.

The continuous borrower's paper. Some question may arise concerning the self-liquidating character of short-time loans which are made to firms engaging in continuous operations with very little seasonal variations. If they borrow at banks, they tend to borrow constantly. Should their paper be considered self-liquidating in the face of the fact that their borrowing tends to be continuous? From a strictly logical viewpoint, such paper can hardly be considered self-liquidating for the reason that the borrowing firm is not automatically able to retire the loan at its maturity. To require that the borrower pay the loan at maturity would involve either a reduction in the volume of working capital (obviously not normally desired) or a recourse to borrowing at other banks. Strictly speaking, it is possible for such a borrower to repay the loan if he has an adequate excess of current assets over current liabilities and is willing to reduce to some extent the scale of his operations. One might, therefore, say that this loan is self-liquidating. However, it differs from loans made to supply working funds needed to carry the borrower over a seasonal peak, since such loans can be repaid at maturity without embarrassment to the borrower.

Fixed capital loans. The self-liquidating loan, according to the traditional theory, provides the bank with the

liquidity so necessary to meet the varying demands of depositors. On the other hand, advances of a fixed capital nature have no direct inherent liquidity. In making such loans the bank must depend upon its ability to shift the burden to other banks. This involves (1) the calling of loans on securities or the reduction of time loans on securities as they mature; or (2) the sale of securities owned outright by the bank.³ To what extent can the banker rely upon the "shiftability" of his security loans and investments to provide him with liquid funds? Is such a reliance safe? These are important questions which are raised by current banking practice. Another question which must be faced is the equally vital one of whether or not, disregarding the matter of liquidity, loans which are not self-liquidating give adequate protection against loss of principal and interest.

Shiftable versus self-liquidating loans. A self-liquidating loan, as we have said, is one which will normally be repaid out of the profits resulting from the use to which the funds are put. A loan which is not self-liquidating, on the other hand, gives rise to no chain of events which will naturally and normally return funds to the borrower within the life of the loan. This can best be illustrated by two examples. Suppose, first, that a person borrows a sum from a bank for thirty days to obtain funds to finance a transaction which cannot be completed within six months. The ability of the borrower to repay his loan in thirty days rests solely upon his ability to increase his income by some method unrelated to this transaction or to borrow elsewhere to replace the first loan. Let us take a second case. Suppose a person makes a thirty-day loan at a bank for the purpose of buying securities. At the end of thirty days the borrower's ability to repay rests upon: (1) his

³ It should be remembered that real estate mortgages and direct advances to business for continuous working or fixed capital needs (when no annual cleanup is required) have practically no "shiftability" and are not self-liquidating.

ability to borrow elsewhere; or (2) his ability to sell his securities to some other party who perhaps borrows elsewhere. Thus it is clear that the liquidity of loans which are not self-liquidating depends entirely upon the success with which the loan can be shifted to some other bank. The same reasoning naturally applies to the outright security holdings of banks. Those with a ready market can be easily sold to other banks or to borrowers at other banks.

To what extent are self-liquidating commercial loans similar to loans which acquire liquidity only through shiftability? In practice, some of the best forms of so-called self-liquidating paper acquire their liquidity through shiftability. This is true of that part of the commercial loans of the country which represent continuous working capital of the borrowers. Liquidity of open-market paper is often achieved (1) by the flotation of new issues, and (2) by the utilization of bank credit lines, and the annual "clean-up" demanded of commercial borrowers frequently involves a mere shifting of loans to other banks. To the extent that this is true, what seems to be self-liquidating paper turns out to be merely shiftable. The continuous operation of the borrower under the circumstances does not permit the liquidation of a sufficient amount of the firm's working capital to actually pay off the bank loans. It is estimated that bankers in large cities expect to be called upon to renew between 40 and 50 per cent of their unsecured loans and are in fact willing to do so, provided the condition of the borrower's business continues to be satisfactory. The "annual liquidation" requirement often made by banks to "line of credit" borrowers is frequently cared for by borrowing elsewhere, either directly from another bank or indirectly through the commercial paper market.⁴

What of the short-time loans to businessmen which are actually self-liquidating? What is the source of their liquidity? Simply this: The borrower will have something

⁴ Moulton, H. G., "Commercial Banking and Capital Formation," *Journal of Political Economy*, 1918, p. 658.

to sell before the loan matures. In the ordinary course of business events the goods can be sold and the loan repaid out of the proceeds. But what determines whether or not the goods can actually be sold? Assuming that they are staple goods, readily marketable, they can be sold at a reasonable price, provided the normal buyers are able to obtain funds, loans let us say, in the ordinary manner to which they are accustomed. Stating it in another way, the self-liquidating character of a good commercial loan depends upon the continuation of the willingness of other banks to extend loans to the buyers of the goods produced by the original borrower. All of this is, of course, a matter of shiftability again. Are we to conclude, therefore, that there is no essential difference in the liquidity of a self-liquidating loan and one which is not? It is true that fundamentally both types of loans depend for their liquidity upon the continuation of the willingness of the banking system as a whole to maintain a given general level of loans. The essential difference between the two types of loans rests in the fact that the individuals on the buying end of transactions arising out of the two types of loans behave differently. The borrower in the case of a self-liquidating loan depends upon selling his goods in the market. Insofar as the goods are in steady demand, they can either be sold to middlemen who directly or indirectly utilize funds resulting from other bank loans, or be sold to consumers who give up a portion of their income. The buyers may normally be depended upon to buy so long as the banking system operates in a normal fashion and the demand for the particular thing to be sold does not falter.

On the other hand, the borrower who uses his funds for the purchase of securities is able to repay his loan if the banking system continues to function normally in furnishing loanable funds and if the buyers of the securities care to buy at that particular moment.⁵ The appearance of

⁵ This is true even if he does not intend to sell but wishes to borrow elsewhere on the same security. The fall in the market value reduces by that amount his ability to borrow elsewhere.

buyers who are willing to buy at prices high enough to enable the borrower to repay his loan is much less certain than the appearance of buyers for the goods of the merchant or manufacturer. This seems to be the core of the difference between the two types of loans. The thing bought by the borrower of funds for working capital purposes is much more certain of finding an ultimate market than the thing bought by a person who makes a non-self-liquidating loan. The latter person is compelled to rely on the sale of long-term capital goods, themselves, or their paper representatives instead of goods more nearly in consumable form. The remoteness of the return on long-term capital, together with the hazards which attend its ownership, result in highly speculative and fluctuating market values. This, then, is the real reason why it is less desirable for a bank with fixed obligations in the form of deposits to acquire assets of the type which are not self-liquidating in character.

On the other hand, a loan which on its face appears to be self-liquidating may in fact turn out not to be so. This would be true, for instance, of a commercial loan used to finance the production of some article which had suddenly fallen into disfavor and had become unmarketable. It would also be true of commercial loans to producers of either luxuries or capital equipment at a time when a depression appears in business.

Objection to fixed capital loans. If our analysis is correct, the real reason why commercial banks must watch carefully capital loans which are not self-liquidating in character is that such loans are based upon long-time capital goods, including real estate, whose present and future value is highly problematical. If a bank wishes to make such loans, it must be certain of obtaining a margin of security sufficiently large to guarantee the liquidity of the loan through shiftability. For example, a loan secured by stocks and bonds must necessarily have enough margin or excess of collateral to insure the bank that changing market values, due to the ebb and flow of speculative fever,

will not endanger the ability of the bank to realize enough on the sale of collateral to cancel the loan. It is unnecessary that the bank be more concerned about the "freezing" effect of a general tie-up of banking operations on collateral loans than on self-liquidating commercial loans. Both types become highly unliquid in case of a general collapse of normal banking functions. Likewise, the outright security holdings of banks are generally shiftable if they consist of high-grade readily marketable bonds. There is, of course, this important distinction between properly margined collateral loans and outright ownership of securities. The collateral loan should protect the bank against losses in market value, whereas there is no possibility of preventing such losses on outright holdings of long-term bonds if it becomes necessary to liquidate them. Even the best of bonds show considerable variation in market value with changes in the market rates of interest.

We are forced to the conclusion that capital loans in the form of loans on stock and bond collateral with adequate margin may be fundamentally just as liquid as the average self-liquidating loan. The same cannot be said for the outright investments of banks unless they combine the characteristics of soundness and nearness to maturity. It should be apparent, however, that the shift in the nature of American bank loans in the direction of more capital loans and investments raises serious questions regarding the methods for managing banks under the somewhat changed conditions.⁶ To achieve liquidity as well as underlying security for portfolios containing capital loans, great care must be taken with regard to both the amount and the marketability of collateral. As long as the collateral is readily marketable and adequate margins are preserved, such loans provide liquidity of a high order. On the other hand, the outright investments in securities other than high-grade short-term bonds do not provide liquidity without danger of serious losses due to changing

⁶ This point is emphasized by Willis, H. Parker, and Chapman, John M., in *The Banking Situation*, 1934, pp. 527-528.

market values. Hence they should be included among banks' earning assets only to the extent to which liquidity is not essential. Another form of fixed capital advances, real estate loans, belongs in the same category, although they possess less marketability than listed bonds.

Effects of the relative growth of fixed capital loans. The increase in the relative importance of fixed capital advances among the loans of American banks gives rise to several questions:

1. How does it affect the essential liquidity of the banks? In answer we can say that properly margined loans on stocks and bonds provide just as much liquidity as does the self-liquidating loan. This is not true of most bond investments and real estate loans, a fact which must be borne in mind.

2. How does it affect the ultimate soundness of the bank assets? Again, the answer in the case of loans on stocks and bonds depends upon the adequacy of the margin of security. In the case of real estate loans and bond investments, the answer is simply this: such advances may be sound and desirable if ample precaution is taken in investigating and watching the underlying security and the obligors' ability to pay. That this is so is indicated by the very favorable experience of the mutual savings banks whose assets are largely of this character.

3. How does it affect the nature of bank management? It requires the banker to become a skillful analyst of the security market in order that the adequacy of margins on loans can be properly determined. Further, it requires skillful analysis of investment values and care in the administration of the investment accounts, as well as expertness in measuring trends in the field of real estate values.

4. How is the relation of the banker to industry affected? The banker as a middleman exercises a directive function through his ability to grant and withhold loans to particular individuals and industries. Insofar as the banker's function becomes one of a mere analyst of the stock and bond markets, his control over the distribution

of capital in industrial uses becomes more remote. His judgment is warped and influenced not only by the prospects of the underlying basic industries behind the securities, but also by the speculative temper of the market. Thus, if adequate margin is offered, he will hardly refuse to lend on securities of corporations to which he might be unwilling to make any direct loans. This, in particular, seems to be one of the serious evils of the growth of security loans at the expense of short-time credit. By lending on securities in a rising market the banks have enabled industry to finance itself without direct contact with the bank. Further, by making easy the increase of long-time capital funds through the stock market, the banks contribute heavily to the maladjustments which characterize periods of boom.

One can hardly avoid the conclusion that the excessive increase in security loans and bond investments represents a weakness of modern banking trends. The dangers of losses on securities, due to inexperience in purchasing and the sacrifices caused by forced liquidation, have been sharply brought to our attention by occurrences since 1929. Is the trend an inevitable one? May a reversal of the trend be expected in the near future? First, one must realize that the individual bank is more or less helpless and must float with the tide. The expansion of stock market financing, based originally and ultimately upon bank security loans, left the individual banker with no choice but to follow along. He was compelled to do so partially because of the attraction of high rates of earnings on stock exchange loans and partially because of the drying up of demand for short-term commercial loans when the marketing of securities became easy. It follows, therefore, that nothing short of outside compulsion can actually accomplish any results. It remains to be seen whether the combined effects of speculator experience and new legislation designed to correct abuses in the security market will be sufficient to shift emphasis again to the short-time loan market.

CHAPTER XIII

BANKERS' ACCEPTANCES

Among the liabilities of banks there sometimes appear the items "letters of credit" and "acceptances." The first is evidence of a promise to extend credit, while the second indicates the actual extension of credit by the bank in whose statement it appears. Bankers' acceptances, as we have already seen, are negotiable drafts drawn against a bank, payable at some future date and "accepted" by the drawee bank on presentment. This acceptance has the effect of binding the acceptor to pay the draft when due. When the accepting bank is well known and of good credit standing in the community, its acceptance is considered prime paper and is much sought after by banks for use as secondary reserve and by other institutions desiring a highly liquid and sound investment.

Borrowing with the use of bankers' acceptances. Firms desiring credit accommodation have the opportunity, under suitable conditions, to draw such drafts on accepting banks and then to sell them in the money market. The borrower must, of course, give the accepting bank adequate assurance that it will be put in possession of funds with which to pay the acceptance when due. Further, the accepting bank charges a commission for the use of its credit. The banker's acceptance, then, appears as a device for enabling a would-be borrower to borrow on the credit of the accepting bank. This is of advantage to him in that he may obtain his money at rates slightly more favorable than if he were to borrow directly. The banker's acceptance in

his possession can be discounted in the central money market at the lowest available rates. The bank is the gainer in that it receives a commission for the acceptance but does not part with any funds or create any deposit liabilities requiring reserves.

This roundabout extension of credit by the accepting bank creates on the liability side of the statement the item "acceptances outstanding." Since the offsetting protection for the liability consists solely of "customers' liability," it follows that the extension of acceptance credit involves just as careful scrutiny of the ability of the borrower to repay as does a straight loan. To prevent the abuse of such credits by American banks, the Federal Reserve Act carefully limits and regulates the acceptance powers of member banks.¹

Regulations governing acceptances. The regulations governing the acceptance of drafts by member banks fall under four main heads.²

1. *Maturity.* The length of time for which such drafts may run is limited to six months' sight exclusive of days of grace.

2. *Volume.* Member banks (including state members authorized by law or charter)³ may accept drafts to an amount aggregating not over 50 per cent of their capital and surplus.

The Board of Governors will entertain applications from banks having a surplus account of at least 20 per cent of their capital for power to accept drafts to an aggregate amount of not over 100 per cent of their capital and surplus. The application will be approved if the Board is satisfied with the standing of the bank and is convinced

¹ Before the passage of the Federal Reserve Act in 1913, national banks were not permitted to accept drafts. State and private banks exercised the function to a limited extent, however, before this time.

² Federal Reserve Board, *Regulation C*.

³ For a digest of state laws on the acceptance powers of state banks, see *Hearings, op. cit.*, Appendix, Part 6.

that banking and business conditions warrant it. However, the aggregate amount of acceptances growing out of domestic transactions cannot exceed 50 per cent of the bank's capital and surplus.

Also, on approval of the Board, member banks may accept drafts drawn by banks in foreign countries for the purpose of furnishing dollar exchange. Such drafts may have not more than three months' sight to run, exclusive of days of grace. The aggregate amount of such drafts shall not exceed 50 per cent of the bank's capital and surplus. This limit is separate and distinct from the limits placed upon other types of acceptances.

3. *Purposes.* Bankers' acceptances may be created by member banks in order to finance the import and export of goods; finance the domestic storage and shipment of goods; finance the storage of goods in and the shipment of goods between foreign countries; and to create dollar exchange.⁴

4. *Security.*⁵ Acceptances arising out of financing the shipment of goods in foreign commerce need have no specific collateral unless the amount of acceptances made for any one firm or person is over 10 per cent of the accepting bank's capital and surplus. Any excess, however, must be secured during the life of the acceptances by attached documents or some other actual security growing out of the same transaction. A trust receipt⁶ is not considered actual security, but a draft drawn on a buyer of goods accompanied by the bill of lading is classed as "actual se-

⁴ The original provisions of the Federal Reserve Act limited the use of acceptance powers of member banks to the financing of imports and exports. Later it was amended to include the power to accept drafts growing out of domestic shipment of goods or based upon documents of title covering readily marketable staples. By rulings of the Federal Reserve Board, this power has been construed to apply to goods in storage in foreign countries and the shipment of goods between foreign countries.

⁵ Federal Reserve Board, *Regulation C*. See also Federal Reserve Bank of Richmond, *Letter No. 12*.

⁶ For a brief description of the trust receipt, see pages 123-124.

curity" even after the documents of title have been surrendered to the drawee upon his acceptance of the draft.

Acceptances arising from domestic shipment of goods must be accompanied by shipping documents of title at the time of acceptance. This requirement arises from the desire to insure that the transaction financed is a self-liquidating one. After acceptance, the documents may be released unless the acceptances for any one person or firm exceed 10 per cent of the accepting bank's capital and surplus. In this latter case, the excess requires collateral security.

In order to indicate their self-liquidating character, acceptances arising from the storage of goods either at home or abroad require security at the time of acceptance in the form of warehouse receipts or other documents of title covering readily marketable staples which await reasonably prompt sale or consumption in the orderly process of trade or manufacture. Again the law does not require that the accepting bank retain the collateral security except against the excess above 10 per cent of its capital and surplus. But if the acceptance is to be eligible for rediscount or purchase by the Federal reserve banks, it must remain secured throughout its life.

Acceptances giving rise to dollar exchange in excess of 10 per cent of the accepting bank's capital and surplus must be protected at the time of acceptance by documents of title or other adequate security.

Accepting banks. At the beginning of their experience with acceptance credits, many banks without adequate knowledge or equipment for acceptance credit work undertook to accept drafts. Such banks were not in close touch with the principal discount markets, with the result that their accepted bills did not command the best rate. This in turn reduced the advantage of using their facilities so that the number of accepting banks gradually declined from about 500 from 1918 to 1921 to about 164 in 1930. These banks were made up of 87 national, 48 state, 10

private, 6 foreign, and 13 American agencies of foreign banks.[†]

Acceptances for financing imports. Acceptances arising from imports originate in the request of an importer to his bank for a letter of credit. This is sent to the exporter in the foreign country and authorizes him to draw a draft on the bank, payable at such future time as is called for by the terms of sale. Under such an acceptance, the issuing bank agrees to accept and pay the draft if properly drawn and accompanied by the bill of lading and other shipping documents showing that the goods have been shipped. When the exporter draws a draft under the letter of credit, he either discounts it at his bank or delivers it to his bank for collection. In either event the draft is forwarded to an American correspondent of the foreign bank for presentment and acceptance. The draft may then be discounted in the American money market or held until maturity for the benefit of the exporter or his bank. The American accepting bank is thus lending its name to assist the American importer to purchase foreign goods on favorable credit terms. The importer may obtain the documents and possession of the goods either upon his own reputation or upon delivery to the bank of a trust receipt or other satisfactory security.

Acceptances for financing exports. Acceptances arising from exports resemble those arising from imports except for the fact that the request for the letter of credit arises from the foreign buyer through his bank. The American exporter is thus permitted to draw a draft on the American bank issuing the letter of credit, to have the draft accepted, and to discount it in the money market. In this way the accepting bank is assisting the foreign buyer to purchase goods on favorable credit terms.

Other uses for acceptances. Acceptances for financing domestic shipment and storage of goods directly assist the

[†] American Acceptance Council, *Facts and Figures Relating to the American Money Market*, 1931, pp. 7-8.

drawer of the accepted draft to obtain funds economically. Acceptances for financing the storage of goods in or the shipment of goods between foreign countries have the result of giving foreign businessmen access to the favorable rates of the American money market. Thus, for example, an Englishman wishing to sell goods on credit to a South American buyer might request that the South American arrange, through his bank, for the issuance of a letter of credit by a New York bank. If this is done, the English exporter ships the goods, draws a draft on the New York bank under the letter of credit, and discounts it with his bank. The English bank forwards the draft to the drawee bank for acceptance, sells it in New York, and transfers the proceeds back to England through the foreign exchange market. The American accepting bank is thus enabling the South American importer to obtain credit in New York for his purchases.

The use of acceptances for creating dollar exchange involves the drawing of time drafts by foreign banks on their American correspondents, which accept the same and have them discounted in the local money market. The proceeds are then credited to the account of the foreign bank in order to provide it with balances against which to draw dollar drafts for the benefit of customers who find it necessary to remit dollars in payment of debts to Americans.

Importance of bankers' acceptances. Before 1929 the total import and export acceptances of American banks amounted to about 50 per cent of the value of our foreign trade. In 1929 and 1930 the low rates in the American money market were responsible for the fact that American acceptances financed 70 per cent of our foreign trade.⁸ In 1935 acceptances financed only 24 per cent of our exports and 32 per cent of our imports.⁹ The greatest gain in any one class of acceptances was in those arising out of the storage of goods in and shipments between foreign coun-

⁸ American Acceptance Council, *op. cit.*, p. 13.

⁹ *New York Times*, March 26, 1936.

tries, which amounted to only \$8,000,000 in April, 1925, but rose to \$560,000,000 in December, 1930.¹⁰

The use of bankers' acceptances as a direct means of handling credit sales in foreign trade is of great assistance to the parties involved. The uncertainty of the credit standing of the importer desiring to purchase on credit makes it necessary in the majority of cases that the credit of a bank be substituted for that of the importer. As a result, not only the hazard of credit extension is reduced for the exporter but the actual cost is reduced through the activity of the accepting bank, which is in a better position to judge the credit standing of the importer, as well as to enforce obligations against him. Therefore, the interposition of the accepting banker decreases the cost of financing foreign trade.

The advantage in the use of bankers' acceptances for financing domestic storage and shipments, and storage and shipments between foreign countries, lies not so much in the economies in the analysis and extension of credit as in the fact that the acceptances give the parties involved an opportunity to obtain credit on more favorable terms by giving access to better money markets than are otherwise available. For example, the domestic acceptance, based upon goods in shipment or storage, enables the drawer to obtain his funds at rates considerably lower than the ordinary customers' rate, although the cost tends to correspond closely to the cost of borrowing on the open market with prime commercial paper. The commission charged by the accepting bank and the dealer's profit must be included in the cost. The banker's commission amounts to about 1 or 1½ per cent per annum on acceptances running for ninety days or longer, while the dealer's profit is about ⅓ of 1 per cent per annum.¹¹ Table XIII shows

¹⁰ American Acceptance Council, *op. cit.*, p. 14.

¹¹ Federal Reserve Bank of Richmond, December, 1923, "Bankers' Acceptances," *Letter No. 12*, p. 16, "Open Market Operations," *Letter No. 13*, p. 18. See also Steiner, Wm. H., *Money and Banking*, 1933

the relation of the bankers' acceptance rates to commercial paper rates.

TABLE XIII

AVERAGE DAILY RATES FOR 90-DAY BANKERS' ACCEPTANCES
AND 90-DAY PRIME COMMERCIAL PAPER^{*}

<i>Year</i>	<i>Acceptances</i>	<i>Commercial Paper</i>
1919	4 33	5 39
1920	5 98	7 04
1921	5 44	6 62
1922	3 50	4 42
1923	4 09	4 97
1924	2 96	3 90
1925	3 28	3 92
1926	3 61	4 27
1927	3 45	4 07
1928	4 10	4 86
1929	5 03	5 74
1930	2 46	3 45

^{*}As quoted by the American Acceptance Council, *op. cit.*, pp 62-63.

In contrast with the average rate of 3.3 per cent which New York City banks charged customers in June, 1934, the rate on ninety day prime bankers' acceptances was only $\frac{1}{8}$ to $\frac{1}{4}$ of 1 per cent. Thus the borrower able to find acceptance credit could pay a commission of 1 per cent per annum, give the dealer his profit, and still get his funds at a cost of less than half that of direct borrowing.¹²

The accepting bank, in times when a brisk demand for loans prevents the accumulation of unused reserves, is willing to accommodate the businessman seeking acceptance credit. Without any tying up of loanable funds, the bank is able to earn a commission through the loan of its name. A bank with \$2,000,000 capital and surplus might maintain acceptance credit of \$2,000,000 outstanding and thus earn from \$20,000 to \$25,000 per year. However, this involves the expense of carrying on the business, including the risk of loss. The very narrow margin of profit, therefore, re-

¹²*Federal Reserve Bulletin*, July, 1934, p. 457. For a good discussion of the advantages of using bankers' acceptances to finance the domestic storage of goods, see Burgess, W. Randolph, *The Reserve Banks and the Money Market*, 1936, Chapter X.

quires that the risk be kept at a minimum by careful extension of credit on transactions that are actually self-liquidating at maturity.

During times of surplus reserves and slack demand for loans, banks which might adequately provide accommodation to customers through straight loans are compelled by competition to give borrowers in a position to get acceptance credit the advantage of the low rates. Frequently in such times the bank discounts its own acceptances, which then become loans while held by the accepting bank

CHAPTER XIV

THE VOLUME OF BANK CREDIT

The volume of bank credit may be measured by two separate standards. In actual practice these two standards are frequently confused and used interchangeably.¹ One measure of the volume of bank credit is the amount of loans and investments of banks. This represents the credit extended by the banks to all borrowers—industrial, governmental, and private—whether for long or short term. The total loans and investments of the banking system correspond roughly with the total bank deposits. This must be so because the loans of any one bank are limited by the volume of its deposits, while for all banks combined, the deposits are to a large extent limited by, and are, the result of loans. This paradox will be considered later.

A second standard used for measuring the volume of bank credit is the amount of bank notes and deposits subject to check. It is obvious that this meaning of "bank credit" differs from the first. Here it refers to the volume of bank promises-to-pay on demand which are acceptable to the public and are being held by it in lieu of cash. In reality it represents the volume of demand credit extended to the banks by their demand depositors and note holders. Putting it in another way, it represents purchasing power held in the form of bank obligations.

Each of these two definitions of bank credit has a special

¹ For a detailed discussion of this point, see Currie, Lauchlin, "Credit in Contemporary Monetary Theory," *Journal of Political Economy*, 1933, Vol. 41, p. 58.

significance. The total loans and investments represent the volume of capital (measured in money) made available to borrowers through the medium of banks. The volume of deposits subject to check measures the extent to which the commercial banks are creating and furnishing the community with substitutes for specie. Not only do each of these concepts of bank credit have special significance but they are also closely related to each other. Of the total amount of deposits resulting from lending operations of banks, a certain proportion will become additions to the supply of demand deposit currency.

Factors Determining the Volume of Bank Credit

To understand clearly the factors which determine the volume of bank credit, we must examine the way in which it is built up. This requires the making of a number of assumptions. Let us suppose that, (1) banks find it necessary to carry cash reserves which equal 10 per cent of their demand deposits and 3 per cent of their time deposits; (2) there is an adequate number of banks with proper capital and a reputation sufficiently good to command public confidence; (3) solvent borrowers are available in sufficient numbers to provide a demand for bank funds; and (4) the banks possess unused free reserves as the basis for more expansion. With the above assumptions in mind, let us trace the consequences of new bank loans.

If a single bank is in possession of excess reserves, it will be able to lend an amount equal to this excess. For example, Bank *A* finds itself with \$1,000,000 in excess reserves. It may lend \$1,000,000, giving the borrowers either cash or the right to demand cash by increasing the balances on their checking accounts. If the borrowers take cash, the statement of the lending bank will show an increase in loans and a corresponding decrease in cash. If the proceeds are taken in additions to checking accounts, the statement will show an increase in deposit liabilities instead of a decrease in cash. This may best be illustrated by an assumed example.

BANK A

<i>Before Lending</i>	<i>After Lending Cash</i>	<i>After Lending Deposits</i>
Assets	Assets:	Assets:
Unused Reserve—	Unused Reserve—	Unused Reserve—
\$1,000,000	None	\$1,000,000
Loans—None	Loans—\$1,000,000	Loans—\$1,000,000
Liabilities: None	Liabilities: None	Liabilities:
		Demand deposits—
		\$1,000,000

Regardless of the form which the loan takes, Bank A will probably lose an amount of cash equal to the new loan. The borrowers will doubtless draw checks against new deposits created for them by the lending bank, so that for all practical purposes it makes little difference to the bank in which form the proceeds are taken. There has been some discussion among writers on banking as to whether or not the lending bank might, in fact, be able to retain part of the deposits credited to borrowers by virtue of the rule, frequently used and discussed elsewhere, that borrowers must carry deposit balances which bear some relation to the amount of loans.² However, this discussion need not concern us here. We may assume, quite correctly for purposes of our analysis, that the bank may lend what it has in the way of excess reserve and will lose cash to the amount of the new loan.³

Multiple expansion of bank credit on the basis of new reserves. If the \$1,000,000 excess reserve of the bank in our example consists of new cash not previously used in the banking system, it may be made the basis of an expansion of bank loans and deposits to some multiple of itself. This expansion process takes place as follows. The borrowed cash, whether withdrawn from Bank A at the

² For a discussion of this, see Phillips, C. A., *Bank Credit*, 1920. For a later study, see Angell, James W., and Fieck, Karel F., "The Expansion of Bank Credit," *Journal of Political Economy*, 1933, pp. 1-32, 52-193.

³ Any deposits which individual banks create out of forced balances are inert and unimportant from the standpoint of credit expansion. Because they require reserves, they restrain rather than increase the power of the banking system to create active deposit currency.

time of the loan or later through checks, is redeposited in other banks. Hence, as a result of the \$1,000,000 loan by Bank *A*, other banks in the community receive new deposits of a like amount. However, in the hands of these other banks, which we may call Banks *B*, the new deposits are mingled with the other existing deposits and become subject to the law of large numbers so that a relatively small cash reserve (10 per cent perhaps) will suffice to protect the bank. Therefore Banks *B* will have \$1,000,000 in new deposits requiring cash reserves of \$100,000. This leaves Banks *B* with free cash or unused reserves of \$900,000, which can be used as a basis for new loans of \$900,000. These new loans will result, as before, in a loss of cash equal to the amount of the loans and a corresponding expansion of deposits in other banks, which we shall call Banks *C*. This series of banks, after setting aside 10 per cent of their newly acquired cash as reserve against their new deposits, will in turn find themselves in possession of unused cash reserves which enable them to make new loans. Thus we see that, so long as borrowers are available, new loans will be made and new deposits created until the original \$1,000,000 in new reserves has been split up into 10 per cent reserves behind a new \$10,000,000 in deposits. If part of the new deposits are put into time deposit form by the individuals who ultimately come into their ownership, the amount of cash reserves required will be less (3 per cent instead of 10 per cent), and the new cash reserves referred to above will support a larger volume of new loans and deposits.

The above illustration is perfectly accurate in its description of the theoretical aspect of the way bank credit is built up. The expansion process may and probably does in practice frequently take place in a somewhat different way. If all of the banks of the community come into possession of new reserves at the same time, it is possible that all would find themselves simultaneously making new loans and creating new deposits at a rate approximately propor-

tional to the relative size of each bank. If this should happen, each bank would find itself gaining new deposits created by other banks at about the same rate that its own loans were tending to bring a loss of cash. To the extent that this is true, no bank would experience a loss of cash, and the expansion of loans and deposits could continue for each bank until its reserve ratio had fallen to the conventional figure. Whether or not the banks of the community expand their loans and deposits "in step," the principle of bank credit expansion is the same.

Checks on the Expansion of Bank Credit

The maximum volume of bank loans and deposits which can be supported by a given cash reserve is subject to an additional limitation which has not yet been mentioned, arising out of the so-called "internal drain of cash into circulation." This refers to the need for additional cash for hand-to-hand circulation, which appears with an expansion in the volume of bank credit. As bank loans expand and new deposits are created, the expanding volume of demand deposits causes or accompanies a rising level of prices.⁴ Gradually the uses for hand-to-hand currency rise through the increase of both payrolls and retail prices. When banks are free to shift their demand deposit obligations into the form of bank note currency, this demand for additional currency can be met without embarrassment. Where this shift cannot easily be made, as is the case in the United States, the currency for circulation must be taken out of the banks' own cash reserves. Therefore the ability of banks to expand credit on the basis of new reserves is considerably limited.

The amount of internal drain of cash reserves into circulation varies with different conditions. Where deposits are utilized to handle dealings in securities, an expansion

⁴The same effect results if expansion occurs in response to growing trade and production.

of deposits has a more belated accompanying demand for currency in circulation than if an increase in demand deposits were utilized to support a commodity price expansion. Some idea of the requirements for circulation may be obtained from Table XIV, which shows the money held by the public and the deposits subject to check at the end of June for the years 1914 to 1927.

TABLE XIV
MONEY IN CIRCULATION AND DEPOSITS SUBJECT TO CHECK*
(In Millions of Dollars)

<i>End of June</i>	<i>Money Outside of Banks (1)</i>	<i>Vault Cash (2)</i>	<i>Deposits Subject to Check (3)</i>	<i>Ratio 1—3</i>
1914	1,820	1,639	9,356	195
1915	1,862	1,458	9,263	201
1916	2,163	1,486	11,784	184
1917	2,564	1,502	13,021	197
1918	3,585	897	15,050	238
1919	3,879	997	17,697	219
1920	4,391	1,076	18,656	235
1921	3,964	947	17,270	229
1922	3,633	830	16,507	220
1923	4,026	797	17,311	232
1924	3,938	912	18,174	217
1925	3,864	951	19,934	194
1926	3,890	998	20,178	193
1927	3,843	1,008	22,861	168
1928	3,909	888	23,356	167
1929	3,926	820	23,408	168
1930	3,656	866	22,661	161
1931	3,938	884	20,506	192
1932	4,904	792	16,124	304
1933	5,048	676	15,484	326
1934	4,660	714	18,903	247

* Data taken, with permission, from Angell, James W., *The Behavior of Money*, 1930, p. 175. For other estimates of money in circulation and deposits subject to check, see Currie, Lauchlin, *The Supply and Control of Money in the United States*, 1934, Chapter III, and Leong, Y. S., "An Estimate of the Volume of Deposit Currency in the United States," *Journal of Political Economy*, 1929, Vol. 37, p. 603, and "Money in Circulation," *Journal of Political Economy*, 1930, Vol. 38, pp. 181-187.

Another factor limiting the expansion of bank credit is found in the "external drain" of specie out of the bank reserves of one country into those of the rest of the world. This occurs when the banks of a country on the gold stand-

and expand their loans and deposits excessively. This drain of reserves from one country to other countries resembles the drain of reserves which an individual bank experiences when it expands its loans "out of step" with the rest of the banking system. Such an expansion, we have seen, results in a loss of cash for the bank to the extent that its loan expansion is not counterbalanced by loan expansion by other banks. If the banks of any given country expand their loans and their demand deposits (including bank notes) at a rate faster than that occurring abroad, there will result an increase in domestic prices of commodities and securities out of line with such prices abroad. This tends to upset any existing international equilibrium of trade and indebtedness, to develop an unfavorable balance of debt, and to induce an export of specie. Again this must come out of bank reserves.

Relation of time to demand deposits. The total volume of bank credit is intimately tied up with the volume of bank deposit and note currency. This arises from the fact that the extension of credit by the banks in the first instance normally gives rise to additions to demand deposits. The proportion of deposits resulting from bank loans which will ultimately lodge itself among the savings and time deposits of the banking system depends upon the current willingness and ability of the income receivers, through whose hands the newly created demand deposits ultimately flow, to accumulate savings in the form of time deposits.

This tendency of savers to make time deposits rather than to invest in securities or real property affects the size of bank time deposits and the reserve requirements of the banks. It does not, however, seriously affect the volume of money substitutes available in the form of demand deposits. A moment's reflection reveals that this must be true. Let us take a simple hypothetical example. Suppose a commercial bank with excess reserves makes a loan and credits the borrower with the proceeds on his checking account; this borrower draws checks against his newly ac-

quired balance and spends it. For the sake of our analysis, assume that the borrower pays out one half of his borrowed bank balance to a businessman who is a customer of another commercial bank and who promptly deposits checks received from the borrower in his own bank. His bank in turn demands cash from the original lending bank, and its demand deposits therefore experience a net increase by that amount at the expense of the first bank.

Now let us assume that the original borrower pays the remaining half of his borrowed funds to some individual who promptly deposits the whole sum in a savings bank. The savings bank follows the usual procedure of presenting the deposited checks for payment and takes the cash. When the savings bank makes a loan or invests the newly acquired funds in securities, it is probable that the borrowed funds will be put into the hands of some individual or firm desiring to utilize them for current purposes. Otherwise they would not be borrowed. When this occurs, the funds borrowed from the savings bank will reappear as demand deposits in commercial banks. In the end, the volume of demand deposits will be approximately just as great as if no increase in time deposits had taken place. The only effect will be a slight reduction due to the necessity for setting aside a small cash reserve against the new time deposit, which renders the savings bank incapable of lending all that it obtained in cash deposits.

Any change in the desire of the public to hold time deposits instead of security investments, therefore, has some effect on the expansion power of the banking system. Other things being equal, an increase in the public's desire for time deposits reduces the power of the banks to create and support demand deposits on a given volume of reserves by requiring that part of the reserve be set aside against the new time deposits.

Demand deposit currency. Although it is true that the lending operations of commercial and savings banks give rise to both time and demand deposits, special attention

must be directed toward the latter, which constitute current purchasing power equivalent to money in the hands of the owner. The demand deposits subject to check and bank notes in circulation make up the bulk of the cash balances of individuals and firms of the United States. Under the present laws, gold itself, which is the monetary standard of the country, cannot be obtained for circulation but must remain in the Treasury as the ultimate backing for our bank deposit and bank note currency. The volume of "bank money," as it is sometimes referred to, is of vital importance in that its abundance or scarcity has some bearing upon the question of the general level of prices. Moreover, the fact that bank money makes up the bulk of our usable money presents a serious problem in that its quantity is largely the result of, although it is by no means synonymous with, variations in the volume of bank loans.

Elasticity of the Supply of Bank Credit

The problem of elasticity of bank credit must be examined from several angles. First, there is the question of elasticity from the standpoint of the lending power of the banks. The business community's desire for bank credit is subject to change from time to time. For example, the business operations of the country experience decided seasonal swings. During the active season borrowers desire more accommodation at the banks; while during the slack season, bank loans tend to be retired. Likewise, during cyclical upswings, businessmen are anxious to expand their capital holdings and resort to the banks for loans. Now, granting that such variations in business activity are a fact to be reckoned with, the banking system which functions smoothly is one which can accommodate itself to these variations in the demand for loans without strain or embarrassment. In other words, it possesses "elasticity."

A second aspect of bank credit elasticity has reference to the question of hand-to-hand currency. This is partly a question of the need for meeting the internal drain accom-

paying an expansion of demand deposits as bank loans increase; also it involves the pronounced changing seasonal requirements for currency in circulation. During seasons when business requiring currency is active, such demands rise. This is particularly true of the autumn seasonal expansion, which is augmented by the agricultural harvest and marketing operations and the Christmas holiday peak. This need for currency would present no difficulties that were different from those arising from the need for new bank loans if banks were able to convert their demand deposit obligations into circulating notes at will. Since the ordinary bank does not have this privilege, it must meet this demand for additional currency by paying out part of its cash reserve. This, naturally, is a painful process since a dollar paid out into circulation reduces by that amount the lending ability of the bank making the payment, and reduces by several times that amount the lending power of the whole banking system. It is not surprising, therefore, that the question of "elasticity" of the banking system has figured so prominently in discussions of banking problems.

The problem of elasticity of bank credit seems to have but one solution. That solution is found in the possession of unused reserves by the banks in times of slack demand for credit and currency. Only here can the basis for the expansion of bank loans and the paying out of cash into circulation be obtained. Given an adequate supply of unused reserves, the banks can meet the demand for new loans and can pay out cash into circulation as needs arise. To be sure, the ability to issue notes freely would be more advantageous because the volume of unused reserves needed to provide elasticity would then be somewhat less. Elasticity, however, can be obtained without bank note issue.

A third aspect of the problem of elasticity of bank credit should be considered here, even though a protracted discussion is not appropriate in this connection. The economic world is interested in the elasticity of bank credit and

currency as it affects not only the ability of businessmen to obtain accommodations but also the volume of deposits subject to check provided by the banking system. If one accepts the proposition that there is any relation between the volume of money and the general level of prices, the volume of money acquires significance. Since the actual money consists mainly of bank notes and demand deposits, the volume of bank deposit and note currency is therefore equally significant. In respect to the volume of such bank money, one may take the position that its volume should vary in such a way as to contribute stability to the economic world. The standard for determining the correct volume is not easy to establish. Shall it be a stable level of prices in the short run or in the long run? If price stability is wanted, what price level shall be singled out for stabilization? Or is there some other standard? Once the standard has been determined, is there any practicable method for bringing it about? The answers to some of these questions belong more properly to the study of monetary theory than to that of banking operations. Nevertheless, the problem of setting up the machinery for control of the volume of bank demand deposit credit will be considered later in connection with the Federal Reserve System.

The Relation of Central Banks to the Expansion of Bank Credit

Perhaps the outstanding distinction between a central bank and other banks lies in the fact that the central bank assumes the responsibility, either through law or custom, of providing the banking system with the unused reserves necessary to a smooth and satisfactory functioning of the whole system. This carrying of unused reserves by the central bank is made possible by some curbing of the profit motive. This curb may arise merely from custom and recognition of public responsibility on the part of the directors of the central bank, as in the case of the Bank of Eng-

land, or it may be provided in the form of governmental representation in the management and a limit on the dividends which can be paid by the central bank on its stock, as in the case of the Federal reserve banks.

The absence of the profit motive as a determining factor in central bank management is necessary if such a bank is to be free from the pressure felt by the managers of private banks. These bankers seek to maintain their loans and investments at the maximum consistent with the safety of the individual institution. Such an attitude is inconsistent with the carrying of unused reserves. A central bank has the duty of maintaining its reserves of standard money in an amount considerably above the minimum required by law or necessity. This being the case, it is always ready and able to furnish other banks with cash by making them loans or by buying (rediscounting) part of their assets. It has become the habit for other banks to carry their cash reserves in the form of obligations of the central bank. For example, in the United States the legal reserves of member banks consist of deposits with the Federal reserve banks, while in England the reserves of the ordinary banks are mainly in the form of deposits with the Bank of England. In the case of both the English and the American "member banks," till money consists to a large extent of notes of the central bank.

The advantage of this arrangement of carrying cash reserves of banks in the form of obligations of the central bank lies in the fact that the cash resources of central banks are thus augmented. New specie coming into the country finds its way into the reserves of the central bank. When banks resort to the central bank for loans to increase their cash reserves, the central bank may create additions to its obligations in the form of deposits or notes. Thus it is possible for the central bank to increase the reserves of the other banks to a much greater extent than would be possible if the borrowing banks were unable or unwilling to take central bank obligations in place of specie. If the

central bank were compelled to make its advances to other banks in specie, each dollar of funds advanced would reduce its cash resources by the full amount. However, if it makes its advances in the form of notes or deposits credited to the borrowing or rediscounting bank, the cash holdings of the central bank are unaffected. For example, the Federal reserve banks are required to carry thirty-five cents in cash behind each dollar in deposits and forty cents in gold certificates behind each dollar in Federal reserve notes issued. Thus, if the Federal reserve bank should lend \$1,000,000 to a member bank and pay out actual standard money, its cash reserves would be reduced by the full amount. But if the member bank received the proceeds in the form of credits on its reserve account deposited with the Federal reserve bank, the process would tie up only 35 per cent of the \$1,000,000 or \$350,000. If payment were made in Federal reserve notes, \$400,000 in gold would be tied up. Thus the lending power of the central bank and its power to provide elasticity is expanded by about two and one-half times, owing to the practice of paying out central bank obligations instead of cash. In addition, the cash of the reserve banks is vastly expanded by the practice of pooling the cash holdings of the member banks as deposits of legal reserves with the Federal reserve bank.

There may be a serious question raised as to the real advantage of having a system possessing such a high degree of elasticity. To the extent that it facilitates the smooth working operations of the banking system, it is beneficial. To the extent that it permits the building up of a pyramid of deposit currency which is inherently unstable and subject to corresponding shrinkage in case of loss of part of the gold base, its advantages may be questioned. It also invites, in times of adequate reserves, an expansion of credit and speculative rising prices.

Reserve ratios and the volume of bank credit. Earlier in the chapter we made certain assumptions preliminary to analyzing the way in which bank credit is created by

the banking system. One of our assumptions had to do with the ratio of cash reserves to deposit liabilities. Our analysis was made on the rather simple assumption that reserves against time deposits were 3 per cent, and against demand deposits, 10 per cent.

This assumption was not far from the facts for member banks before the increases in legal reserve requirements beginning in August, 1936. The 7, 10, and 13 per cent reserve requirements against the demand deposits of members average about 10 per cent for all the demand deposits. However, one qualification must be made. The assumed percentage reserves constitute only the legal reserves for member banks. In addition, the banks must carry cash for till money, which should be added to the legal reserve requirement. Finally, banks normally carry deposits in other banks as part of their working reserves. One may properly count the carrying of interbank bankers' balances as one of the necessary costs of bank credit, using this term in the sense of total deposits exclusive of bankers' balances. Such bankers' balances in turn require cash reserves. The cash reserves behind the deposits of member banks other than bankers' balances thus consist of: (1) the legally required reserves; (2) the till money cash which banks find necessary; and (3) the legal reserves required to support bankers' balances or interbank deposits.

The volume of interbank deposits carried by the banking system bears no rigidly fixed relation to the volume of other deposits. In times of slack local demand country banks have, in the past, tended to deposit their excess funds with large city banks to obtain the interest offered by the city banks. This movement of funds from the country banks to city banks increased the volume of bankers' balances against which reserves had to be carried. During times of active local demand for loans, country balances with city banks were reduced to the minimum required for working reserves, with a consequent reduction in the volume of reserves required to support bankers' balances.

The prohibition on the payment of interest on demand deposits under the Banking Act of 1933 will probably reduce this variation in the volume of bankers' balances. Even in the days of fluctuating bankers' balances a residual amount of such interbank deposits was normally maintained, and legal reserve requirements against them constituted part of the reserve costs of maintaining the structure of bank deposits.

The bank credit expansion possibilities of the banking system have experienced considerable changes. These changes are well illustrated in the computations made by the Federal Reserve Bank of Richmond of the differences in the required reserves of member banks as of December 31, 1924, when computed on the basis of the legal requirements of the National Bank Act prior to the Federal Reserve System as contrasted with the existing reserve requirements.⁵ Under the old law, member banks on December 31, 1924, would have been required to maintain legal reserves of \$5,958,947,000, of which not less than \$3,766,753,000 would have consisted of cash in vault. Under the Federal Reserve Act as of 1924, the required reserves, plus actual working cash reserve in vault, would have amounted to \$2,757,826,000, or a reduction of slightly over one billion dollars (26 per cent).

Economic Effects of Commercial Banks

Bank credit and the supply of capital. The deposits of savings banks represent the current capital accumulations of one particular form of saver. A person with income in excess of his spending deposits his excess funds in a savings bank, thus committing part of his current income to the benevolent hands of the bank. The bank gives the depositor a savings deposit, with all the perquisites thereof, and takes possession of the "saved" part of his income,

⁵Federal Reserve Bank of Richmond, "A Study of Reserve Requirements," *Letter No. 18*.

which is turned over to some borrower. If the funds are wanted for productive purposes, the borrower spends them for capital goods. Thus there is diverted from the production of consumption goods to the production of capital goods part of the current productive labor of the community.

There are only two essential differences between this process of saving through the savings bank and a more direct form of investment such as the purchase of bonds. When it is done through the savings bank, a residuum in the form of a savings deposit remains. This adds to the total volume of bank deposits, since the saved funds deposited in the savings bank reappear again in the hands of some commercial bank as a demand deposit. In the case of direct investment there is no net addition to the bank deposit structure. The demand deposit of the investor is merely exchanged for the securities bought from the borrower seeking capital. The second difference is that the new deposits growing out of this form of saving through the savings bank require cash reserves, and hence influence the volume of bank credit that can be created on a given volume of standard money reserves. We may properly conclude, therefore, that the expansion of savings bank deposits represents the expansion of savings in the manner of any other form of savings and investment.

An interesting question arises in connection with the expansion in the deposits of commercial banks. We know that at certain times, particularly during periods of prosperity, commercial bank credit in the form of deposits subject to check expands rather rapidly. Further, the country usually experiences a long-run growth of its demand deposits. What are the consequences of this expansion? We have already examined the relation of the commercial bank and its demand deposits to the mobility of working capital. At any given time the demand depositors are holding the promises of banks to pay cash in lieu of cash

itself or capital goods, and the borrowers, as a class, are enabled to obtain possession of capital goods by virtue of their ability to trade their borrowed deposits for goods.

Forced saving. What is the effect on the supply of capital goods of an expansion in the loans and deposits of commercial banks? One must notice this distinction between the expansion of the loans and deposits of commercial banks and those of savings banks. Capital accumulation through deposits of the savings banks must wait upon the willingness of the saver to set aside part of his income. However, capital accumulation through the expansion in deposits of commercial banks seems not to await the pleasure of the saver in the ordinary sense of the word. Rather, if the commercial banks find themselves with excess reserves and anxious borrowers, they make loans and create new deposits which are not of the innocent savings bank variety but full-grown, virile, readily acceptable money substitutes or bank money in the form of demand deposits. Thus the effect of the expansion of commercial bank credit differs from that of the growth of savings deposits.

How does this expansion affect the formation of capital? Let us suppose that the banks expand their loans and demand deposits by \$1,000,000. The borrowers come into possession of that amount of new purchasing power which did not previously exist, and which they promptly spend in the market for, let us say, capital goods. The sellers of these goods accept in return the newly created demand deposits in the banks as the equivalent of cash. It is hardly proper to speak of these sellers who exchanged their goods for the new demand deposits as being new savers of capital, for they would probably have sold their goods anyway. (We may disregard the possibility that they may part with more goods than is customary with them because of a slightly higher price.) Is there, then, any actual increase in the supply of capital goods resulting from this credit expansion? The answer is to be found in the effect of this

new supply of borrowed bank deposit purchasing power upon all other persons whose purchasing power remained unchanged. Unless industrial output is increasing, the spending of the new deposits by the borrowers must inevitably result in the forcing up of prices of the things bought. Only thus can the borrowers succeed in buying goods which would otherwise have been bought by someone else.

Now, if the new deposits are thrown into the market and prices are forced up, and if the supply of the thing wanted should be so inelastic that no new supply is available regardless of the price, the net effect of the borrowing would be to enable the new borrowing-spenders to wrest part of the existing supply of capital goods from those who would otherwise have been the purchasers. Obviously such a result would have no effect on the supply of capital. But normally, there is some elasticity in the supply of any capital good. Either labor and materials are diverted from the making of other capital goods by the superior return to be had in the industry feeling the impact of the new borrowers' demand, or they may be diverted from the making of consumption goods. Only in the latter case does real saving appear. Since the factors of production for making consumption goods (particularly labor) coincides to a considerable extent with those required for making capital goods, any pronounced expansion in purchasing power released into the community through commercial bank loans and deposits is almost certain to result in some substantial diversion of effort from the making of consumption goods into the making of capital goods. It is quite possible, however, that the new purchasing power will be spent to employ labor, resources, and capital that have hitherto been idle for one reason or another. To the extent that this is so, new capital is created in place of what would be mere idle time. It would not be amiss to point out the fact that the same argument regarding the effects of new purchasing power

expended applies to any increase in the velocity of the circulation of money and deposits already in existence and to the expansion of money by the government.

Advantages of bank deposit and note currency substitutes for specie. The use of substitutes for specie in the form of paper money and checking accounts is ordinarily assumed to contain some social advantage. Such a phrase as "economizing the use of specie" is commonly used as evidence of such advantage. Just what such expressions actually mean, however, is not apparent from a superficial glance.

To maintain its price level in equilibrium with that of the rest of the world already using specie substitutes, a country without substitutes for specie would require more specie per unit of economic transactions than would its neighbors. If it were to introduce the use of specie substitutes in the form of bank currency, the immediate effect would be a tendency toward increased domestic prices, an unfavorable balance of international indebtedness, and eventually a loss of specie to foreign countries until a new international price equilibrium was again established. In the meantime, the country introducing bank currency would have traded its nonproductive specie for imports of supposedly useful goods. We may conclude that for any single country there is an advantage in using bank currency, since to do so enables that country to trade part of its specie for other goods. But, for the world as a whole, is there any general advantage arising out of the use of bank currency? In the end, is not the only change to be found in the fact that the world is able to enjoy a higher price level than if it limited itself to specie currency? It is a well-known economic principle that the particular price level, if stable, is not the important thing. It is the change from one to another that causes trouble. Is there, then, no advantage which accrues to the world out of the use of bank currency? The answer is "yes." In fact, there are two sources of economic gain arising from the use of specie substitutes.

First, the higher price level made possible by specie substitutes tends to divert labor and capital away from the relatively futile occupation of digging gold out of the ground and piling it up in the monetary systems. Second, the higher price level has the effect of increasing the proportion of gold actually mined which goes into industrial uses. Thus, in the end, the advantage to the world of "economizing in the use of specie" amounts to this. that less effort is expended in mining gold, and more of what is mined finds its way into industrial uses⁶

A more doubtful advantage of bank credit currency can be found in the fact that, in periods when the volume is expanding, a measure of "forced saving" takes place. This is especially convenient as a means whereby governments of countries at war are able to wrest supplies from the unsuspecting people with a minimum of immediate inconvenience and complaint. Of course, this advantage does not rest exclusively with bank credit, for it is equally available through the direct issue of government paper money. In addition to the convenience afforded governments at war, the expansion possibilities of bank credit during the prosperity period of the business cycle facilitates the delightful illusion which characterizes boom periods

⁶For a development of this point, see Mints, L. W., "The Elasticity of Bank Notes," *Journal of Political Economy*, August, 1930

CHAPTER XV

THE EARLY BANKING SYSTEM OF THE UNITED STATES

Source of banking institutions. Economic institutions, in which category the banking system may be included, have their roots far back in the experiences of the past. They develop gradually out of the trial and error practices of economic society but are constantly being modified by social pressure for reform or control. It follows, therefore, that a clear view of an existing institution can best be gained through some historical perspective. It is for this reason that we approach the present banking system of our country by a brief study of past developments. In this way the significance of many of the features of the present banking structure are revealed.

Banking Before the Civil War

Problem of incorporation. There was considerable dispute in the banking discussions in the fifty years preceding the Civil War as to the propriety of confining banking privileges to incorporated banking firms. In general, banks of deposit were permitted to operate privately, while banks with the right to issue notes were required to incorporate, although illegal banks frequently issued notes in spite of the efforts of the law and the incorporated banks to prevent them from doing so.

Advantages of note issue. Before the Civil War, bank notes furnished the major part of the nonspecie currency of the country. Outside the cities, particularly, this was

the case. The use of checks drawn against demand deposits is feasible only when individuals using them have confidence in the credit standing and honesty of each other and when facilities are available to accomplish prompt presentment. Naturally, at a time when transportation and communication were but poorly developed, the use of engraved notes of banks payable to the bearer was superior in most cases to the use of checks. The relatively great importance of bank notes is well illustrated by the reported condition of eleven New York City and eleven country banks in 1829.¹

	<i>Loans and Discounts</i>	<i>Capital</i>	<i>Notes</i>	<i>Deposits</i>	<i>Cash & Due from Banks</i>
City banks	\$16,702,467	\$11,252,160	\$3,528,623	\$4,448,088	\$2,970,978
Country banks	6,185,520	2,906,413	3,137,510	1,042,865	1,127,124

It is not surprising, therefore, that the banking legislation of the times placed a good deal of emphasis upon regulation of the note-issuing powers.

Evils of bank note currency. The characteristic of bank notes which makes them adaptable to the economic circumstances of pioneer societies is also a source of weakness, as the experiences of the early banks indicate. Bank notes could be issued in the absence of any effective means for presentment and redemption, since they bore the appearance of money itself. It followed, therefore, that notes sometimes remained in circulation, and only sporadic attempts were made to redeem them. This fact opened the way to abuses. A bank which was able to keep a large volume of its notes in circulation could expand its loans by this amount. Indeed, some bankers even exchanged bank notes for property. Under such circumstances it was easy for banks to issue an excessive quantity of notes which could not be redeemed in specie if occasion demanded. The banker, lulled into repose by his success in avoiding re-

¹ Chaddock, Robert E., *The Safety Fund Banking System in New York State, 1829-1866*, N. M. C., 1910, pp. 239-240.

demption, often maintained an entirely inadequate specie reserve. Further, there was a strong temptation to issue bank notes against purely speculative ventures, thus feeding the fires of speculative fevers and causing subsequent collapse and disaster.

Restrictions on note issues were lax and were usually made in terms of some proportion of the bank's capital stock. This was often meaningless, because capital stock was normally not paid for in specie. It was almost a rule that stockholders should be allowed, directly or indirectly, to pay for their stock with their own promissory notes. The notes of the less reliable organizers of banks were startlingly elastic and valueless, so that the foundation for bank note issues was often precarious from the start.²

The bank notes of the times provided an unsatisfactory currency in many ways. Redemption was made difficult by the fact that banks were deliberately set up in remote and inaccessible places, far from the centers of trade. The notes were then loaned by agents in other districts. In the West such banks earned the title of "wildcat banks," because of the penchant of their organizers to locate deep in the woods, out of reach of such disagreeable persons as brokers and agents of other banks who were bent upon presentment of bank notes for specie. Not only were bankers prone to set up their banks in inaccessible places, but they also put many obstacles in the way of payment to persistent collectors who actually discovered the den of the "wildcatter." A favorite practice was to pay out small change, a process making for prolonged periods of delay and embarrassing transportation problems. Moreover, public sentiment favored the bankers by condoning the ingenious practices developed to avoid redemption.³

Evil effects of unregulated note issue. The effects of these conditions on the business affairs are well described

² Dewey, Davis R., *State Banking Before the Civil War*, N. M. C., 1910, pp. 5-20.

³ *Ibid.*, p. 74.

in the following quotation from Whitney's *The Suffolk Bank* ⁴

The business man of today knows little by experience of the inconvenience and loss suffered by the merchant of sixty years ago arising from the currency in which debts were then paid . . . The merchant of 1818, receiving payment in bank-notes, assorted them into two parcels, current and uncurrent. In the first he placed the notes issued by the solvent banks of his own city, in the other the bills of all other banks. Upon these latter there was a discount, varying in amount according to the location and the credit of the bank issuing them. How great the discount was he could learn only by consulting the "Bank Note Reporter," or by inquiring at the nearest exchange office, and he could avail himself of them only by selling them to a dealer in uncurrent money. He could neither deposit them nor use them in payment of his notes at a bank. The discount on them varied from one per cent upward, according to the distance the bills had to be sent for redemption and financial standing of the bank by which they were issued. Many banks were established in remote places mainly for the purpose of making a profit on circulation. The more distant they were from the business centers the more expensive it was to send their bills home for redemption, and the more difficult it was for the general public to know their true financial condition.

Experience of Boston banks. Not only were businessmen in general subjected to the troubles of an uncertain currency, but individual banks, like the Boston banks, suffered from a form of unfair competition. The situation was such that they found it difficult to maintain their notes in circulation in the face of the flood of bank notes put out by banks in surrounding areas. In those days the lending power, and therefore the profits of a bank, were influenced to as great an extent by the bank's ability to keep its notes in circulation as by the size of its deposits. The predicament of the Boston banks is seen in the fact that:

. . . the notes of the banks in New York and all the New England States—many of them of doubtful solvency—were spread broadcast over the country and found ready acceptance

⁴ As quoted by Root, L. Carroll, in *Sound Currency*, June 1, 1895, p. 276

even at Boston, where they almost monopolized the field. Scarcely a dollar of Boston paper could be seen. The reason was not far to seek. The notes of foreign banks, so long as they were known to be solvent, passed readily from hand to hand in ordinary business transactions but at the banks they were not accepted. Persons having payments to make at the bank therefore found it advisable to lay aside any notes of Boston banks which might come into their hands, as such notes and specie were the only forms of currency accepted at par by the banks, while foreign notes which were readily accepted in business were paid out again and thus kept in circulation. The ordinary method of procedure when the holder of any of these foreign bills wished either to make a payment at a bank or to procure specie was to exchange them at a discount with some one in Boston who would give him Boston money, instead of sending them to the issuing banks for redemption in specie . . .

A committee of the directors of the Suffolk Bank, April 10, 1824, laying before the other banks of Boston their plans for checking the enormous issues of the country banks, especially those of Maine, called attention to the fact that the 11 banks of Boston possessed a capital of \$11,150,000 out of a total for all New England of less than \$20,000,000, yet the country banks furnished \$7,500,000 of the circulating medium, while the banks of the city with a capital more than equal to all the rest, kept in what might be fairly termed permanent circulation, only \$300,000⁵

Action of the New England Bank. The inconvenience to business had been somewhat reduced by the action of the New England Bank, which in 1813 began to accept bank notes on deposit at such discount as actually equalled the cost of sending the notes home for redemption. This had the effect of reducing the discount on "foreign" notes to some reasonable and regular proportion. It did not abolish the discount altogether, and the disadvantage which the Boston banks suffered remained. It was not until 1825 that the now famous Suffolk Bank System instituted a "par collection system" for bank notes and abolished the discount on foreign bank notes.

The Suffolk Bank. The Suffolk Bank of Boston agreed to act as a collection agency for the other six banks of the

⁵ *Ibid*, pp 277-279.

city. It received notes on out-of-town banks, originally at a slight discount but later at par. In turn it made arrangements with the other New England banks to redeem their notes in Boston, provided such banks maintained a deposit of \$2,000 or more, free of interest, in addition to the amount required to redeem the notes. In return for this the banks maintaining deposits with the Suffolk Bank were allowed to deposit, at par for credit, on the day following their receipt, all notes of any New England bank of good standing. A bank which refused to join the system found its notes presented for collection at the bank itself in the same manner as the Federal reserve banks presented checks on non-par banks during the "par collection controversy." The results were favorable. The majority of the banks found it expedient to coöperate. Within six months' time the circulation of Massachusetts banks outside of Boston decreased \$382,371, and that of the Maine banks decreased \$336,819. The circulation of the Boston banks, in the meantime, increased \$283,497.⁶ Thus New England was possessed of a high-grade currency acceptable at par and subject to the check of continuous redemption.

Need for regular presentment. The effect of regular presentment for redemption should be emphasized. Under such circumstances it is impossible for any individual bank to make more loans, create deposits, and issue notes at a rate faster than that at which all banks are expanding, unless that bank is prepared to withstand a drain of cash through redemption equal to the new loans made. It is necessary, therefore, that each bank carefully watch its specie reserve and avoid too rapid loan expansion. Such a situation is an invitation to the cautious and conservative loan policies which are so necessary for a sound banking system.

The First Bank of the United States. Even a brief discussion of early banking history of the United States cannot omit reference to the two banks of this period which were

⁶ *Ibid.*

chartered by the Federal Government. The First Bank of the United States was established in 1791, with its main office in Philadelphia and branches in New York, Boston, Baltimore, Washington, Norfolk, Charleston, Savannah, and New Orleans. It issued a limited volume of bank notes, acted as fiscal agent for the government, and served to restrain excessive note issue of state banks, which were becoming numerous, by forcing them to redeem their notes in specie. This it could do by rejecting notes which were not convertible and by making such notes nonacceptable by the Treasury, for which the Bank was fiscal agent. Unfortunately, upon the expiration of its charter in 1811, the friends of the Bank were unable to overcome the political opposition of those who feared the growth of money monopoly and the extension of the power of the central government. Much was made of the fact that British capitalists owned over two thirds of its capital. This argument was particularly telling in view of the strained diplomatic relations then existing with England. The charter was not renewed, and the only uniform, sound bank note currency capable of wide circulation in the country at that time was lost, along with a powerful and effective aid to government financial operations. The country was left to face the financing of the war of 1812 with only the unreliable state chartered banks to support it.

The number of state banks increased from eighty-eight to two hundred eight in the four years 1811 to 1815, while their note issues increased from \$23,000,000 to \$110,000,000. In 1814 most of the banks outside New England suspended all pretense of redemption of notes in specie, and the currency system of the country was badly demoralized. It was the opinion of Secretary Gallatin that much of this could have been avoided had the First Bank of the United States continued to function.[†] The suspension of specie payments by the state banks sadly embarrassed the gov-

[†] Hopburn, A. Barton, *A History of Currency in the United States*, 1915, p. 90.

ernment, which was unable to transfer what funds it possessed in the form of bank deposits from one district to another to meet varying needs.⁸

The Second Bank of the United States. The chaotic condition of the banking system led many to favor a new bank, similar to the First Bank of the United States, and on April 10, 1816, a bill was approved by President Madison granting a charter for the Second Bank of the United States. During its first two years the Bank was the victim of mismanagement, but beginning with 1819, under the new and conservative management of Mr. Langdon Cheves, it assumed its place as an effective, conservative bank and fiscal agent for the government. Through its branches it forced specie redemption upon the state banks. Bank notes deposited with it by customers or received from the Treasury as governmental revenues were presented for redemption. Banks which refused to redeem their notes found them rejected and not acceptable for payments to the Treasury.

The action of the Bank in exerting pressure upon state banks to maintain their notes at par provoked the hatred of banks of the West and South, which had been the worst offenders against sound banking.⁷ Depression brought distress to debtors, who were easily persuaded that the Second Bank of the United States was causing all their troubles by curbing the activities of the state banks. When the time of the expiration of the old charter arrived, the Bank was embroiled in a political quarrel with President Jackson, and a renewal of its charter by the Federal Government became impossible. The Bank therefore disposed of its branches, obtained a charter from the state of Pennsylvania in February, 1836, and for some time continued to operate. After difficulties in the panic of 1837 it finally closed in 1841.⁹

The Safety Fund System of New York. Another early attempt to improve banking conditions took the form of

⁸ White, Horace, *Money and Banking*, 1896, p. 272

⁹ White, *op. cit.*, pp. 277-313

a mutual guaranty fund out of which creditors of failed banks were to be paid. The state of New York adopted the "Safety Fund System" in 1829. Between that year and 1839 new charters were granted to ninety-three banks under the Safety Fund law. These banks were chartered by a special act of the legislature but were required to conform to the law as a prerequisite to obtaining a charter.

Each bank which obtained a charter was required to contribute annually to the fund $\frac{1}{2}$ per cent of its paid-up capital until it had paid in an amount equal to 3 per cent of its capital. After the assets of failed banks had been liquidated, any deficiency owed to the banks' creditors was to be paid out of the fund. As the fund became depleted, further assessments of the same nature were to be made.

Contributions to the fund were first made in 1831. In 1841-42 eleven of the safety-fund banks failed with an aggregate capital of \$3,150,000. The sum which had been paid into the fund by these banks was but \$86,274; while the amount required for the redemption of their circulation was \$1,548,588, and for the payment of claims of their other creditors \$1,010,375, making a total of \$2,558,933. According to the report of the State comptroller made in 1849, the whole amount contributed to the fund down to September 30, 1848, was but \$1,876,063; and even if full payments as required by law had been made by all the banks organized under the system, the fund would still have been insufficient to pay the deficiency occasioned by the insolvency of these eleven banks. This deficiency was subsequently provided for by the issue of a 6 per cent stock by the State, to be re-imbursed largely by new contributions from the banks. During the year 1842 the act was so amended that the safety-fund became a security only for the notes in circulation and not for the other debts of the new banks; such banks were still required to obtain special charters, as before the passage of the act. Another feature of the system was the appointment of three bank commissioners to supervise and inspect the several banks, and report the result of their investigations to the legislature annually. It was supposed that in a commission consisting of three persons each would be a check upon the others. To effect this purpose, the governor and senate were to

appoint one commissioner, the banks in the southern portion of the State another, and the remaining banks a third.¹⁰

By a change in the state constitution in 1846, the note-holders not only were made prior claimants against the fund but also were given prior claim against the assets of failed banks. The preference shown noteholders at this time has continued down to the present day. In all banking legislation in the United States noteholders are given special consideration. This was true of the national banking system when national bank notes were being issued, and it is still true of Federal reserve note issues. The reasons generally given for granting preference to noteholding creditors over deposit-owning creditors of banks are: (1) Bank note holders are involuntary creditors, since they receive bank notes of all kinds in the ordinary course of trade, with little opportunity to reject the unsound notes. Depositors, on the other hand, may choose their bank. (2) Noteholders are usually working people, of the poorer classes, who are less able to bear losses due to bank failures than the more well-to-do classes who carry bank deposits.

The Safety Fund System suffered from the fact that contributing banks paid in proportion to their capital rather than to their notes. Nevertheless, it achieved a remarkable success in protecting the noteholders against ultimate loss from failure. The annual contributions for its period of operation (1830 to 1866) averaged slightly less than $\frac{1}{2}$ per cent of the banks' capital. The total amount collected from the banks amounted to \$3,110,999, while total payments were \$2,600,000. The difference was the interest paid the state for its aid during times of stress.¹¹

The free banking system. The state of New York inaugurated another plan, which was destined to color the banking practices of the United States, when it adopted the "free banking system" in 1838. This came as a reaction

¹⁰ *Report of the Comptroller of the Currency, 1876*, pp. XXI-XXIII.

¹¹ Chaddock, *op cit.*, p. 336.

against the banking monopoly created by special chartered banks.

Free banking involved two principles. First, banking was to be made a "free trade," open to all without discrimination or favoritism. Second, banks were to issue notes only against the security of proper collateral sufficient to insure ultimate redemption. It was incumbent upon the state, therefore, to lay down the rules under which banks might be organized and notes issued.

At first, the free banking system worked badly in New York. The comptroller was authorized to issue circulating notes to any association organizing itself as a bank and depositing with him the obligations of the United States or any individual state, or real estate mortgage bonds. Twenty-nine free banks failed during the first five years, with resultant substantial losses to noteholders. These banks had an aggregate circulation of \$1,233,374, secured by stocks, bonds, and mortgages having a face value of \$1,555,338. On liquidation, however, they were sold for only \$953,371, which permitted payment of the bank notes at seventy-four cents on the dollar. To correct the evil of depreciation in the value of securities pledged for the protection of bank notes, amendments were made in the law to permit only the use of bonds of the United States and the state of New York and qualified mortgages.¹²

The free banking system proved popular. Ohio adopted it in 1845, Illinois in 1851, Indiana in 1852, and Wisconsin in 1853. Free banks were for the most part primarily interested in the issuance of notes. Since the system was designed to insure the safety of bank note holders, it is not surprising that little, if any, provision was made for regulating banks except in regard to note issue. Because of the acceptance of low-grade securities as collateral for the notes, even protection for noteholders was not achieved. The outbreak of the Civil War found many of the free banks

¹² *Annual Report of the Comptroller of the Currency, 1876*, pp. XXIII-XXIV.

in Illinois owners of obligations of southern states which rapidly fell in value.

Evils of free banking. The system of free banking naturally led to many abuses. Principally, it facilitated the development of wildcat banking, as is well illustrated by the following quotation.¹⁸

In practice it was hardly necessary for the bank to have a place of business if its notes were secured, and I remember that in some instances where attempts were made in Illinois to present notes for redemption at the bank's counter no counter was found, but merely a hired room in some place remote from any railway station and situated on some bottomless prairie road. As the country banks had a decided advantage over the city banks in the way of nest-hiding, the latter resorted first to the device of not paying out their own notes at all, but borrowing those of Eastern banks instead. Facilities for travel were too good, however, in the East. The notes paid out in Illinois and Wisconsin went home to be converted into New York and Boston funds too rapidly. So the city bankers went to the State of Georgia and started a lot of subordinate banks there, with whose notes they flooded the Northwest from Chicago as a radiating point. None of these currency mills actually failed, but the rate of exchange on New York was measured by the cost of sending the notes to their several Georgia houses for redemption, which cost was at that time considerable. The Western free banks for the most part went down in the crash of 1857, and again in that of 1861, and their securities being pressed on the market simultaneously sank to low figures, the notes falling even lower than the securities. Whatever may have been the design of the law-makers (and there is no reason for doubting that it was good), it turned out to be a mere scheme to enable speculators to sell bonds to the public, and continue to draw the interest themselves. It was possible under these laws for a man to borrow, say, \$100,000 of State bonds, deposit them with the auditor, receive from him circulating notes, buy wheat with these notes, send the wheat to New York, and sell it for money with which to buy more bonds to deposit with the auditor; and so round and round. This was actually done in some cases, and it was considered an effective way of procuring an adequate supply of money.

¹⁸ White, Horace, "Wildcat Currency Experience," *Sound Currency*, December 1, 1894

The situation was further disturbed by the fact that counterfeiting of bank notes became popular. The multitude of issues made the practice easy. The West and South, particularly, suffered from the currency troubles. All merchants kept bank note reporters at hand in order to determine the value, if any, of currency presented in the course of trade. Not only were as many as 5,400 counterfeit notes catalogued in one bank note reporter, but also genuine notes were acceptable at varying discounts, depending upon the possibilities and costs of redemption.¹⁴ The situation is epitomized in the following quotation from an early magazine¹⁵

In the West the people have suffered for years from the issues of almost every State in the Union, much of which is so irredeemable, so insecure, and so unpopular as to be known by opprobrious names rather than the money it pretends to represent. There the frequently worthless issues of the State of Maine and of other New England States, the shinplasters of Michigan, the wildcats of Georgia, of Canada, and Pennsylvania, the red dogs of Indiana and Nebraska, the miserably engraved notes of North Carolina, Kentucky, Missouri, and Virginia, and the not-to-be-forgotten stump-tails of Illinois and Wisconsin are mixed indiscriminately with the par currency of New York and Boston, until no one can wonder that the West has become disgusted with all bank issues and almost unanimously demand that such a currency shall be taxed out of existence, and give place to a uniform national currency.

Examples of good banking during period. The period was not without its examples of good banking, even in that part of the country noted for wildcatting. Both South Carolina and Indiana operated state-owned banks with singular success. Each bank had the right of note issue without any collateral requirement; each operated branches; and each was blessed with sound management.

¹⁴ White, Horace, *Money and Banking*, pp. 405-406.

¹⁵ *Hunt's Merchant's Magazine*, January, 1863, an article entitled "By a Western Banker," quoted by Davis, Andrew M., in *The Origin of the National Banking System*, N. M. C., 1910, p. 14.

The Bank of the State of South Carolina was founded in 1812 and was finally liquidated in 1870 after many years of useful existence. The State Bank of Indiana was established in 1834 and operated as a state-owned institution for twenty-five years, when its business was absorbed by a newly organized but privately owned bank of the same name, which operated successfully until 1866, when the tax on state bank note issues caused it to liquidate.¹⁶ There were also privately owned banks which stood out in bold relief against the general mass of low-grade banking of the times. One of these was the State Bank of Ohio, which maintained thirty-six branches and was a model of excellence.¹⁷

Summary. This short survey of the banking events and developments before the Civil War shows vividly the defective currency and banking facilities of the times. Except in cases where banks voluntarily set up some form of redemption similar to the Suffolk plan, notes circulated at varying discounts and overissue led to failure. A partial palliative was provided in New York by the Safety Fund System, but the widespread adoption of free banking led to complete chaos in many areas. In spite of the chaotic condition among note-issuing banks, some banks maintained sound banking practices, which later furnished the basis for the establishment of an effective commercial banking system.

¹⁶ *Ibid*, pp. 374-386.

¹⁷ *Ibid*, pp. 386-387

CHAPTER XVI

THE NATIONAL BANKING SYSTEM

Congressional provisions for a national currency. As early as 1861 it was proposed that United States bonds should be made available to support the issue of a sound and uniform currency. It was hoped that such a scheme would have the double advantage of stimulating the government bond market and furnishing the country with a currency secured by the obligations of the government. The War made it imperative that the government should be able to obtain necessary funds; at the same time it was important that the disadvantages of an uncertain currency be avoided if possible.¹ Nevertheless, it was not until March 3, 1863, that there was passed "An act to provide a National currency, secured by a Pledge of United States Stocks, and to provide for the Circulation and Redemption thereof."² This act was the legal beginning of the national banking system. That the main interest of Congress in passing this act was centered upon the currency question is evident from the title. The following year (June 3, 1864), a new law was enacted which repealed the previous law and incorporated some changes which appeared, in the light of previous experiences, to be desirable.³ This law, like its predecessor, prescribed in minute detail the requirements pertaining to note issue, but little attention was given to the discount and deposit functions of the national banks.

¹ Davis, Andrew M., *The Origin of the National Banking System*, pp. 36-37.

² 12 Stat. L., 665.

³ 13 Stat. L., 99.

Provisions of the National Banking Act. The main provisions of the law governing the setting up and operation of national banks should be noted

1. Provision was made for a Comptroller of the Currency, appointed by the President and operating under the general direction of the Secretary of the Treasury, who was charged with the duty of executing all laws dealing with the national currency.

2. A method of procedure was laid down for the organization of national banks. Capital requirements, which, incidentally, are the same as those prevailing today, were.

\$50,000 in cities of not over 6,000 inhabitants

\$100,000 in cities from 6,000 to 50,000 inhabitants

\$200,000 in cities over 50,000 inhabitants

The stock was subject to double liability. One tenth of net profits were to be carried to surplus until it equalled 20 per cent of the capital stock.

3. Before beginning business, at least 50 per cent of the capital subscribed was to be paid in, the remainder to be paid within five months. The bank was also required to deliver to the Treasurer of the United States registered government bonds amounting to not less than \$30,000 and not less than one third of the bank's capital stock.

4. The bank was entitled to receive from the Comptroller national bank notes equal to not over 90 per cent of par or market value of the bonds deposited, whichever was the smaller, but the total notes issued to any one bank might not exceed the bank's capital stock.

5. Banks might not lend more than 10 per cent of their capital stock to any one borrower (except the discount of bills of exchange and notes owned by the one offering them for discount). They might not lend on their own stock or hold real estate mortgages.

6. The banks were made subject to examination by agents of the Comptroller and required to furnish the Comptroller with statements of their financial condition.

7. Banks were required to carry lawful money reserves against deposit and *circulating note liabilities*. These reserves were to be 15 per cent for all banks outside of certain designated reserve cities. Three fifths of this amount might be carried as a deposit in banks in the reserve cities for redemption of notes. The reserve city banks, in turn, were required to choose a national bank in New York City as a redemption agent for their notes and might carry one half of their required 25 per cent reserves on deposit with that bank. The New York banks were required to carry a 25 per cent reserve in cash.

8. Each national bank was required to take the notes of every other national bank at par.

9. National banks were prohibited from becoming indebted for money borrowed to an amount in excess of their capital stock.

10. The national banks were to pay a semiannual tax of $\frac{1}{2}$ of 1 per cent on circulating notes, $\frac{1}{4}$ of 1 per cent on deposits, and $\frac{1}{4}$ of 1 per cent on that part of their capital stock which was not invested in United States bonds.

11. National banks might be designated as depositaries of public moneys if satisfactory security was given.

12. In case of failure of a national bank to redeem its notes at its office or redemption agency, the holder might protest them. The Comptroller was then empowered to take possession of the bonds pledged to secure the note circulation and to give notice that the notes might be redeemed at the Treasury. The Treasury might dispose of the bonds, and any deficiency appearing after the redemption of the notes was chargeable as a prior lien against the assets of the bank.

13. The entire circulation was not to exceed \$300,000,000.

14. Provision was made for converting state-chartered banks into national banks.

Reaction to the national banking law. The response of the bankers to the new national banking law was disappointing. Existing state banks found it more profitable to

retain their state charters with their note-issuing privileges than to come under the restrictions of national charters. By the end of 1864 there were only 638 national banks with a circulation of \$67,000,000.⁴ Congress therefore passed an act on March 3, 1865, which, with later amendments, levied a 10 per cent tax upon any bank or individual paying out or using state bank notes.⁵ One of the amendments permitted state banks to be converted into national banks while retaining existing branches. The prohibitory tax on state bank notes, as well as the leniency shown toward branch banks, tended to increase the number of conversions from state to national charters. By the end of 1865 national banks had increased in number to 1,582, with a circulation of \$213,000,000.⁶

An additional problem arose out of the original \$300,000,000 limit on the amount of national bank notes. As conversions of state banks in the East became widespread, it became apparent that no circulation privileges would remain for the West and South, where the existing banking system had generally collapsed, and the organization of new national banks was slow. In 1865, therefore, the law was changed, reducing the amount of notes which could be issued to larger banks to some fraction of the bank's capital, and further providing that one half of the \$300,000,000 in notes was to be allocated according to the population of the regions in which banks were located.⁷ To relieve the situation further, Congress in 1870 authorized the issuance of \$54,000,000 of additional currency to national banks in areas which had been unable to procure their fair share.⁸ It was not until January 14, 1875, that the limit on the total volume of national bank notes was removed.

⁴ Hepburn, *op cit*, p. 310.

⁵ 13 Stat L, 469, 14 Stat L, 146.

⁶ Hepburn, *op cit*, p. 311.

⁷ 13 Stat L, 498.

⁸ 16 Stat. L, 251.

The original act required country banks to maintain a redemption agent in the form of an approved national bank in a designated reserve city, while the reserve city banks were to maintain a redemption fund with an approved New York City bank. Required reserves were to be carried against both deposits and notes in circulation. By 1874 it had become apparent that national bank notes had acquired such a reputation for soundness that redemption was seldom required. Further, because each national bank was limited in the volume of notes which it could issue by the amount of its capital and by the bonds deposited with the Treasury, there was little desire on the part of one bank to redeem the issues of other banks. To do so would hardly affect the issue powers of the bank presenting them for redemption. The law was amended on June 20, 1874, to: (1) remove the requirement for carrying reserves against notes; (2) remove the requirement for maintaining redemption facilities in reserve cities and New York City; and (3) require each national bank to maintain a deposit of lawful money with the Treasury equal to 5 per cent of its notes in circulation, from which the Treasury would redeem notes presented. This redemption fund might be counted as part of the required reserves against deposits.⁹ It is interesting to note that in spite of the abolition of required redemption agencies in reserve cities, the privilege of depositing part of the required reserves in the banks of such cities remained.

Further modifications of the law. From time to time the law governing the note issues of national banks was further modified. In 1874 the minimum amount of bonds on deposit to secure circulation was fixed at \$50,000. In 1882 banks with a capital of not over \$150,000 were required to deposit bonds amounting to not over 25 per cent of their capital; the law was also changed to fix the maximum circulation privilege of any one bank at 90 per cent

⁹ 18 Stat L. pt. 3d, 123.

of its paid-in capital stock.¹⁰ In 1900 the law was again amended to permit banks to issue notes in amounts equal to their capital stock up to the full par value of bonds deposited with the Treasury, instead of 90 per cent, as before.¹¹ This change was intended to make the issuing of notes more profitable at a time when the scarcity and high price of bonds bearing the circulation privilege was causing a reduction in the circulation of notes.¹² Other modifications in the law included the extension of the right of reserve city classification to cities with, first, a population of over 50,000 (1887), and later (1903), of over 25,000, upon petition of three fourths of local national banks. Also, in 1887, upon petition of three fourths of the national banks, cities with a population of over 200,000 might be classified as central reserve cities and be eligible to hold deposited reserves of reserve city banks. Chicago and St. Louis qualified under this provision and, together with New York, were known as central reserve cities.

In 1900 a concession was made to small towns by reducing the required minimum capital for banks in towns of not over 3,000 inhabitants to \$25,000, whereas \$50,000 had previously been the minimum. This change was made for the purpose of stimulating the organization of banks under national instead of state charters. State laws quite generally permitted the organization of banks with a capital of \$25,000 and sometimes less. It was not until the passage of the Banking Act of 1933 that the minimum requirement was restored to \$50,000.

Expanding the powers of national banks. The national banks have from the first been subjected to more rigorous regulations and have been more limited in their powers

¹⁰ 22 Stat. L., 162

¹¹ 31 Stat. L., 45.

¹² In August, 1935, all bonds bearing the circulation privilege were called for redemption. This means the end of national bank note issues, as soon as those bank notes which are outstanding are worn out and sent in for final redemption.

than the state banks. The state banks were able to make real estate loans, were usually free to carry on investment banking functions, and were frequently permitted to lend more than 10 per cent of their capital stock to one borrower, to own corporate stock, and to organize as trust companies. Further, because of more favorable reserve requirements against demand deposits, they were able to absorb the bulk of the savings deposit business. The national banks attempted to obtain some of the advantages of state charters by organizing state bank affiliates with power to lend on real estate, to engage in trust company business, and to compete for savings bank deposits. This arrangement was available only to the larger banks. The smaller national banks could not afford two separate organizations.

The advantages enjoyed by the state banks are reflected in the figures for the relative number of state banks shown in Table XV.

TABLE XV
RATIO OF STATE-CHARTERED BANKS TO ALL BANKS IN UNITED STATES
(By Per Cents)

1876	42.6%	1905	55.4%
1880	30.3	1910	55.6
1885	45.1	1915	56.2
1890	49.8	1920	57.3
1895	53.9	1925	59.2
1900	53.0	1928	60.0

In what appears to have been a vain attempt to overcome the advantage of state charters, the powers of national banks have been gradually increased. To accomplish this the following changes were instituted:

1. The national banks outside of central reserve cities were given power to make a limited amount of first-mortgage loans on improved farm land for a period of not over five years, and on city real estate for not over one year. Later (1927 and 1935) these privileges were expanded.

2. Under the Federal Reserve Act of 1913, national banks can apply to the Board of Governors of the Federal

Reserve System for permission to qualify as trust companies.

3. The Federal Reserve Act permits national banks to carry lower required reserves against time deposits than against demand deposits.

4. At various times the limit on the size of individual loans of national banks has been relaxed. In 1906 the limit was made 10 per cent of a bank's capital and surplus instead of the previous rule of 10 per cent of the capital alone. In 1919 and 1927 exceptions were added to bring the law to its present form.

5. The double liability feature of national bank stock was abolished in 1937.

Difficulties Arising Under the National Banking System

The national banking system successfully met the problem of establishing a sound and uniform currency. National bank notes, backed by government bonds and the pledge of redemption by the United States Government, could hardly have been excelled for security. Moreover, the national banks themselves were a very substantial addition to the banking facilities of the country, particularly in the West and South where banking had been chaotic. They furnished the backbone of the development of a commercial banking system on the discount and deposit basis at a time when deposit banking was becoming a more important function of American banking than note issue.

Seasonal variations in business. Nevertheless, there were some definite weaknesses in the financial and banking structure which the national banking system failed to meet successfully. These weaknesses grew out of the seasonal character of American business activity and the tendency of banks to deposit surplus cash funds with city correspondents who undertook to pay interest and return the funds on demand.

The effects of seasonal variations in business activity on the banking system are very significant. In the United

States there are two pronounced seasonal periods of expansion, one in the spring, the other in the fall. The latter is accentuated by the harvesting and marketing of crops. To serve the country competently, the banks should be prepared to make loans and pay out currency to meet the needs as they arise. To accomplish this, unused reserves are required during the slack season.

The movement of excess and legal reserves to the money centers. It is possible that the original redemption system set up for bank notes, with its privilege of carrying part of the legal reserves with the city redemption agents, was partially responsible for the practice of sending excess funds to the money centers. At any rate it soon became a firmly established habit for banks in the interior to send their unused cash to Chicago and New York. The movement of funds to and from New York is well shown in Table XVI, which gives the average monthly currency receipts and shipments of the New York banks for the years 1905 to 1908

TABLE XVI
CASH RECEIPTS AND SHIPMENTS OF NEW YORK BANKS*
(Monthly Averages for the Years 1905 to 1908)

Month	Shipments	Receipts
January	33,079,000	114,354,000
February	32,180,000	47,821,000
March	47,097,000	54,097,000
April	65,212,000	64,072,000
May	35,568,000	68,759,000
June	37,570,000	64,275,000
July	38,969,000	53,795,000
August	69,236,000	36,576,000
September	88,553,000	25,899,000
October	109,547,000	30,422,000
November	87,451,000	31,384,000
December	78,439,000	57,317,000

* Kemmerer, Walter, *Seasonal Variations in the Relative Demand for Money and Capital in the United States*, N. M. C., 1910, pp. 77-79.

It was the New York banks which were most successful in attracting these seasonal deposits, owing largely to the outlet for loanable funds in the New York stock market.

The competition for bankers' balances between the so-called "Wall Street Banks" was keen, and the interest rates which they offered were excessive. Before the crisis of 1873, seven of these banks held between 70 and 80 per cent of the bankers' deposits. At the same time their cash reserves were slightly below the legally required 25 per cent.¹³ This situation naturally developed out of the competition of these banks and their desire to make profits. Circumstances induced them to expand their loans to the maximum on the basis of country bank deposits whenever borrowers were available. During stock market booms, reserve ratios tended to stay at the minimum allowed by law. It necessarily followed that a reversal of the flow of cash from New York to the interior banks put great pressure upon the New York banks to liquidate their loans. To illustrate this point, in 1872 the loans of the seven banks referred to above were \$80,000,000 in July and \$61,000,000 in October, after the autumn withdrawals by country banks had occurred. This was a loan contraction of 24 per cent.¹⁴

The result of loan contraction by New York banks. The effect of this drastic contraction of loans by New York banks may be easily visualized. The loans reduced were mainly call loans to finance speculators on the stock exchange. To pay off their loans, borrowers had to do one of two things. They might and did at times, when the money market was functioning normally, borrow elsewhere to repay the bank which was calling their loans. During the autumn withdrawals, this recourse was not available to any great extent. The only course open, therefore, was to sell securities held on borrowed funds. Only thus could the borrower build up checking account balances in banks out of which he could discharge his debts. Again, when times were normal and public confidence in the future was high, the borrower had little trouble in paying his debt,

¹³ Sprague, O. M. W., *Crises under the National Banking System*, N. M. C., 1910, pp. 15-24.

¹⁴ Sprague, *op. cit.*

since buyers for his stock readily appeared if the price was favorable. In times of excessive speculation when stock prices were pushed so high as to cause a genuine fear of future values, the speculator-borrower found himself with no market for his securities. The lower prices fell, the more general became the refusal of others to buy stock. There followed an acute panic in security prices, a situation which has often preceded a major depression in business.

The alternatives to loan contraction. But what of the banks at such a time? If loans could not be called because securities could not be sold, the banks found it impossible to reduce their deposit obligations. If their reserve ratios were already at the minimum prescribed by law, they were in the position of having to choose between shipping currency to the interior and allowing reserve ratios to fall below the legal limit, or maintaining their reserve ratios but defaulting on their promise to return country bank funds on demand. The first choice, which was followed in 1873, would have been the more desirable one from the standpoint of public policy. At other times the city banks followed the second method, with the result that a bankers' panic and general suspension of cash payments by banks developed. When this happened, the effect upon business was paralyzing. Country banks refused to purchase drafts drawn on commercial houses in the cities because they could not be collected. The movements of trade were therefore hindered. Exchange on New York sold in Chicago at a discount of \$30 per \$1,000 in August, 1893, in the midst of the third crisis of that year. Banks struggled to improve their reserve ratio by reducing loans, which further embarrassed businessmen. Locally, currency sold at a premium in terms of bank deposits.

Because the city banks carrying bankers' balances held almost no excess reserves, they were compelled to choose between a contraction of loans, a reserve ratio below the legal limit, or suspension, whenever there was a decline in the balances of their banks. During the crises of 1893

and 1907, particularly, they preferred to suspend cash payments rather than allow their reserves to fall much below 25 per cent. Critics of the system have been inclined to place a large part of the blame for the difficulties upon the rigid reserve requirements. The law, as it stood, did not forbid banks from allowing reserves to fall below the legal limit. It merely forbade the making of new loans and the paying of dividends while banks were in that condition. True, this was somewhat awkward for the banks, but it was not sufficient cause for suspension. It was the attitude of the banks toward the reserve limit rather than the reserve limit itself that was at fault. Either the New York banks, open to largely predictable seasonal pressure from country bank withdrawals, should have willingly utilized their reserves in time of need, or they should have maintained reserves above the 25 per cent limit for such emergencies as were certain to arise.

The need for elasticity. The banking and currency situation proved, therefore, a most trying one. As the banking system actually operated, it failed miserably to give the country a smooth-functioning banking service in keeping with its needs. As we observed earlier in this discussion, the trouble arose out of the inability of the system to adapt itself to the seasonal needs of business. It should be noticed that the ebb and flow of funds from the country areas into the city banks was not only a seasonal occurrence but a cyclical one as well. In slack years, country bank balances crowded the central money markets; while during prosperity, the tendency was toward a reversal of the process. This, in itself, was not so important a factor in causing difficulties as were the seasonal movements. When harvesting and grain moving time came, the agricultural banks required currency to meet the needs for money in hand-to-hand circulation. The autumn rise in general business also added to the currency requirements. Banks needed their cash both for payment into circulation and as a reserve basis for new loans. Stating the situation in a somewhat

different way, the banking system needed seasonal elasticity of some sort to enable it, without strain, to make new loans and pay out cash when seasonal needs arose. In practice, a seasonal expansion in the demand for loans and currency in the interior required a sharp curtailment of loans on the stock market at least; at its worst, it precipitated a general collapse.

How Can a Banking System Be Made Elastic?

This raises the vital question of how a banking system can achieve the required elasticity. So far as mere currency requirements are concerned, the ability of banks to shift their demand deposit liabilities into note liability form would meet the situation. Then loans and deposits on existing cash reserves need not be reduced. For this reason the critics of the national banking system placed a large part of the blame for the trouble upon the national bank notes. They were, it was alleged, inelastic in nature because they were secured by government bonds.

Why national bank notes were inelastic. There are several reasons why national bank notes were not responsive to the needs for currency. First, since they were issued against government bonds, the maximum volume of notes was limited by the amount of government debt bearing the circulation privilege. This, in itself, however, was not the real difficulty.

Second, the available bonds often sold at a high premium. In 1888 the premium was 30 per cent, while notes could be issued to only 90 per cent of par. Thus it was necessary to invest \$130 in 4 per cent bonds to gain the privilege of issuing \$90 in notes. The loss arising from the necessity for writing off the premium during the remaining life of the bonds, and the further loss of interest on the \$40 extra investment in bonds yielding 4 per cent, which might have been earning the higher local loan rate, caused banks to issue notes only against the bonds which the law required them to own. The note circulation declined from

\$341,000,000 in 1874, when national banking capital was \$490,000,000, to \$126,000,000 in 1890, when national banking capital was \$618,000,000. Again, this had no real bearing upon the question of seasonal elasticity.

Third, it was impossible for a bank to meet its currency needs by the purchase of bonds with the circulation privilege. The premium at which they sold meant that a bank would perhaps lose more cash than it received in the form of notes. Moreover, a considerable delay was involved in the process. Obviously, then, a bank could make a seasonal increase in its currency only on the basis of bonds already owned or upon borrowed bonds. The latter were used to a limited extent.

Fourth, since seasonal elasticity could be obtained only by issuing notes against bonds already in possession of the bank, it would have been necessary in the off seasons to retire notes from circulation while retaining the bonds. Here we have the real cause of the inelasticity of national bank notes. No self-respecting banker would care to retire his notes and hold the low-yield United States bonds. In fact, his notes were in general circulation and seldom reappeared at his bank, and hence could hardly be retired. The only alternative remaining to accomplish a reduction of currency was the sending in of legal tender currency to the Treasury. This, of course, would be unprofitable if interest could be obtained from city correspondents for the deposit of such currency. Whenever a banker's supply of cash exceeded the existing local needs, he promptly sent it to his city correspondent, who in turn utilized it as a basis for credit expansion in the city markets. Under the circumstances, regardless of the type of note issue that might have been permitted, short of one with no fixed top limit, bankers issued all the notes allowed and sent in surplus lawful money to the money centers in slack times. Consequently they found themselves unable to issue more notes during the busy season. This was certain to be the result unless a bank's note-issuing powers were not completely exhausted before bank notes had satisfied the local

currency needs. Then further note issue would have become superfluous.

The real source of elasticity of credit and currency. The real secret of the inelasticity of loans and currency of the national banking system lay in the unwillingness of banks to refrain from utilizing their funds in the speculative markets. The source of elasticity in a banking system, as is so ably pointed out by L. W. Mints,¹⁵ is in the maintenance by banks in slack times of unused reserves in an amount sufficient to care for later needs. Because of their desire for competitive profit, the New York City banks which carried the lion's share of the bankers' balances failed to carry a sufficient margin of unused reserves to enable them to meet the changing demands for currency from the interior. In other words, they did not perform the duty which their position imposed upon them.

Treasury aid to banks. In times of money stringency the banks clamored for aid from the Treasury. It was true, of course, that the Treasury normally held substantial amounts of currency which might have been of some help to the banks if it had been transferred to them. During the panic of 1873, the Treasury placed about \$13,000,000 in the money market by purchasing bonds for sinking fund retirement.¹⁶ During the troubles of 1890, the Treasury disbursed nearly \$70,000,000 in the redemption of bonds.¹⁷ In 1893 similar action was taken. In 1907 the Treasury aided banks by depositing with them \$36,000,000 between October 19 and October 31,¹⁸ while it more or less regularly expanded its deposits with the "pet banks" each autumn as crop-moving time arrived.¹⁹

Clearing house loan certificates. The banks themselves utilized clearing house loan certificates as a means of pre-

¹⁵ "The Elasticity of Bank Notes," *Journal of Political Economy*, August, 1930, Vol. 38.

¹⁶ Spague, *op. cit.*, pp. 40-41.

¹⁷ *Ibid.*, p. 139.

¹⁸ *Ibid.*, p. 203.

¹⁹ Willis, H. Parker, *The Federal Reserve System*, 1923, p. 30.

serving a semblance of normal operations in the face of restrictions on currency payments. These loan certificates were issued by the clearing house committee to member banks with debtor clearing house balances which could not be met in cash without impairment of reserves. The certificates, bearing interest and properly secured by the deposit of collateral by the debtor bank, were acceptable among the local banks in settlement of clearing house balances.

The use of loan certificates was frequently coupled with a refusal by banks to cash checks unless presented by a depositor willing to take credit on his own deposit account, or by a clearing house bank which would take payment in such loan certificates, so that settlement could be made without any loss of cash. Under this arrangement banks were able to withstand withdrawals arising from purely local runs or local business transactions. They might, in some instances, even expand loans to borrowers who had to meet local commitments.

Although the clearing house loan certificates permitted the functioning of local deposit currency, they did little to care for the needs for actual currency. For instance, their use would not enable New York banks to pay out currency to their country correspondents. Neither would it facilitate the meeting of local currency demands. Certified checks and cashier's checks were sometimes used to supplement the use of ordinary checks. In 1873 eight cities resorted to the use of clearing house loan certificates; in 1884 New York alone issued them; in 1893 they were issued in eight cities; and in 1907 they were issued in forty-two cities.²⁰

Clearing house checks. To meet the need for actual hand-to-hand currency, clearing house associations issued loan certificates (or their equivalent) in small denominations, engraved to resemble currency. These were acceptable by the banks for deposit and, of course, were redeemable

²⁰ Sprague, *op. cit.*, pp. 45, 62, 112, 142, 145, 180, 289.

in legal money when suspension was over. In 1907 about \$35,000,000 of this illegal emergency currency was issued.²¹

The natural elasticity of a banking system. There is a source of elasticity in any banking system which arises from the fact that the demands against banks in the same and in different areas tend to dovetail. While some banks are under pressure to expand their loans and pay out currency, others are not. It follows, therefore, that any system which permits the tapping of the unused reserves of some banks for the use of others adds to the elasticity of the whole system. A comprehensive system of branch banking would achieve this result. Under the unit national banking system there were only three basic ways in which this dovetailing of demands against banks could be accomplished:

1. The larger borrowers were able to shift from one bank to another and obtain funds from those having excess reserves by utilizing the commercial paper market.

2. The banks themselves possessed a fair-weather system of pooling reserves through their deposit of surplus funds in the money centers. Except for the wider seasonal swings, the shifting funds of individual banks made a sustained fund on which the central money markets drew. In addition, individual banks were able to borrow from their city correspondents to meet their particular needs.

3. The banks might have a recognized procedure of rediscount whereby needy banks might acquire the surplus reserves of others. This expedient was tried in New York in 1873, when the clearing house banks not only issued loan certificates but instituted a system for equalization of reserves among the various banks. Thus banks with reserves depleted by currency withdrawals were able to borrow surplus reserves of other banks. Unfortunately this was not used during other crises.²²

Throughout the history of the old national banking sys-

²¹ *Ibid.*, p. 452.

²² *Ibid.*, p. 46.

tem, banks were reluctant to become indebted for money borrowed or for rediscounts. This may have been partially due to the legal limit of 100 per cent of a bank's capital on such indebtedness. The insignificance of such methods of mobilizing reserves may be seen from the fact that during the crisis of 1893 rediscounts and bills payable rose to only 3 per cent of loans and discounts of the banks. In 1907 they were 2.2 per cent, while in the normally prosperous year of 1905 they were only .7 per cent.

Emergency currency under the Aldrich-Vreeland Act of 1908. The acute banking crisis of 1907 resulted in the passage of an emergency currency law which provided for the voluntary organization of incorporated national currency associations. Not more than one might be organized in each city, and at least ten national banks, having an aggregate capital and surplus of \$5,000,000, were required. Provided a member of such an association had already outstanding national bank notes equal to 40 per cent of its capital, it might deposit securities and commercial paper with the association in trust for the United States. The association might then apply to the Comptroller for additional circulating notes to an amount not exceeding 75 per cent of the cash value of the paper and securities pledged, unless the securities pledged were state or municipal bonds, in which case the limit was 90 per cent of the market value. The liability of the participating banks to each other was in proportion to their capital and surplus. The government had an unlimited prior claim against all the assets of each bank to protect it against loss through redemption of the notes. Individual banks which were not members of national currency associations were permitted to pledge approved state and municipal securities and receive emergency currency in amounts not in excess of par or 90 per cent of the market value.

The total amount of such emergency currency was not to exceed \$500,000,000. To assure its retirement, a tax was levied against the notes, varying from an annual rate of 5

per cent for the first month up to 10 per cent for the sixth and subsequent months. No occasion arose for the use of the privileges of this act before it expired June 30, 1914. In the meantime, however, the Federal Reserve Act had been passed. Since the reserve banks could not be put into operation before the expiration of the old emergency currency law, Congress incorporated into the Federal Reserve Act a one-year extension of the old act, with modifications to include state member banks under its privileges and with other minor changes, including a lowered tax rate.

The outbreak of war in Europe put great pressure upon the American banking system, and the banks quickly availed themselves of the privilege of obtaining emergency currency. Forty-five national currency associations were organized, with 2,197 members, which were authorized to issue \$386,444,215 in new currency.

Need for a central bank. All of the devices and practices just described failed to go to the root of the problem. They offered only a partial escape from the evils of inelasticity. The only effective cure lay in the maintenance of adequate unused reserves upon which the banking system might draw to meet both seasonal and emergency needs. This called for some form of central bank.

One vital distinction between central banks and other banks lies in the fact that custom, tradition, or law set sufficient curbs upon the profit-seeking motive to insure that central bank affairs are administered with an eye to proper public policy. Central banks normally provide other banks with reserves, either in the form of deposits with the central bank or in the form of notes. So long as the central bank itself carries sufficient reserves to enable it to make new loans, either in the general market or directly to other banks, it can, by so doing, expand the reserves of other banks almost at will. This is, of course, the reason why the profit motive of a central bank must be restrained, since otherwise it would be likely to behave in the same manner as the Wall Street banks.

CHAPTER XVII

THE FEDERAL RESERVE SYSTEM

The birth of the Federal Reserve Act. The Aldrich-Vreeland Act of 1908 created a National Monetary Commission, which carried on an extensive investigation into banking history as well as current banking practices. The results of its studies, made by trained economists, have been published and furnish a voluminous source of historical information on banking experiences before 1910. In addition, the Commission prepared and recommended a banking reform measure known as the Aldrich Bill, which provided for the formation of a National Reserve Association to be capitalized at not less than \$100,000,000. It was to have its head office in Washington, to comprise fifteen branches, and to be owned by the member banks. The central bank would have power to rediscount paper for its members, hold deposited reserves without interest, and deal in the open market in United States bonds. It might issue asset currency, provided a 50 per cent cash reserve was maintained.¹ The bill was introduced in 1912 but was not passed. It became a controversial question in the presidential election of that year, with the Democratic platform flatly opposing the establishment of a central bank but advocating a systematic revision of the banking laws to provide temporary relief and protection from the "Money Trust."² The Democratic victory of that year meant the end of the Aldrich Bill. In

¹ Willis, H. Parker, *The Federal Reserve System*, pp. 81-82.

² *Ibid.*, p. 103.

its place was passed the Federal Reserve Act of 1913. Instead of one central bank with branches, it provided for the setting up of a regional system of not less than eight nor more than twelve reserve banks. Thus the fear that the new system would be dominated by the Money Trust was allayed. Over the whole system was the Federal Reserve Board, which had general supervisory powers. Actually twelve districts were established, with a Federal reserve bank in each.

The Federal Reserve Banks

The following statement of the Federal Reserve Bank of New York will form our point of departure in the study of the reserve banks.

CONDITION OF FEDERAL RESERVE BANK OF NEW YORK, JUNE 29, 1935

<i>Assets</i>		<i>Liabilities</i>	
Total cash reserves	\$2,449,777,000	Capital stock paid in	\$50,389,000
Bills discounted	3,140,000	Surplus	56,542,000
Bills bought in		Reserves for contingencies	7,500,000
open market	1,796,000	Notes in circulation	706,568,000
Industrial advances	6,790,000	Deposits:	
U. S. Government securities	746,318,000	Member bank reserves	2,158,694,000
Uncollected items	149,012,000	U. S.	25,505,000
Bank premises	11,882,000	Foreign bank	7,641,000
Other assets	36,131,000	Other deposits	232,080,000
		Total deposits	\$2,424,010,000
		Deferred availability items	144,423,000
		Other liabilities	6,414,000
Total assets	<u>\$3,404,846,000</u>	Total liabilities	<u>\$3,404,846,000</u>

The cash assets of the reserve banks come from three sources only: the contributions of member banks through stock subscriptions, deposits of cash, and the issue of Federal reserve notes in exchange for cash.

Capital of the Federal reserve banks. The Federal Reserve Act provided that no reserve bank might be established with a subscribed capital of less than \$4,000,000.

Every national bank is required, on penalty of forfeiture of its charter, to belong to the system, and any eligible state bank or trust company may join. Each member must subscribe to an amount of capital stock in the reserve bank of its district equal to 6 per cent of its own paid-up capital and surplus. If its capital and surplus are increased or decreased, its subscription to reserve bank stock is correspondingly modified. The Act further provided that in the event that insufficient capital was subscribed by member bank stock in the reserve banks might be offered for sale to the general public. If the capital were still insufficient, stock might be sold to the United States Government. Only stock held by members would have voting power. In point of fact, the member banks in all cases subscribed to a sufficient quantity of reserve bank stock to make its sale to the public or to the government unnecessary.

One half of the subscriptions to Federal reserve bank stock have been paid in, with the other half subject to call. The stock bears double liability so that the member bank in the New York District might be called upon for additional contributions of \$59,389,000 on their unpaid subscriptions and \$118,778,000 more on their double liability if such amounts are needed to meet the obligations of the reserve bank.

Deposits of the Federal Reserve Bank. As can be seen from the condition of the New York Federal Reserve Bank the balances of member banks on deposit constitute the bulk of Federal reserve bank deposits. Other deposits consist of clearing balances of nonmember banks, deposits of the United States Government, and foreign bank deposits. These deposits, insofar as they are deposits of cash and not the result of lending operations by the reserve banks, are the most important single source of cash which the reserve banks possess.

The law requires the Federal reserve banks to maintain a reserve of lawful money equal to 35 per cent of total deposits, although under penalty of a graduated tax, the reserve ratio may be allowed to fall below 35 per cent if the

Board of Governors of the Federal Reserve System suspends the requirement. In addition to cash received from stock subscription and deposits, the reserve banks have in the past increased their cash holdings by putting Federal reserve notes into circulation and retaining the lawful money displaced.

One should note here that, since the deposits of member banks with the reserve banks constitute the latter's most important source of cash, any changes in the volume of member bank deposits, except those arising out of the expansion or contraction of loans and investments, may cause a change in the cash holdings of the reserve banks. This is especially true of deposit variations arising from the importation and exportation of gold. Imported gold (or the resulting gold certificates under the current practice) is normally deposited with the reserve banks for credit on the reserve account of importing banks. Until the anti-hoarding rules were instituted in 1933, banks were under no compulsion to deposit imported gold, but found it a convenient way to build up reserves. When gold is needed for export, it is normally obtained through the reserve banks. (Under present rules the banks have no other avenue through which to obtain gold)

The profit motive and the reserve bank. We have seen that some escape from the complete domination of the profit motive is necessary in an institution which is to assume the functions of a central bank. In the case of the Federal reserve banks, special safeguards are incorporated in the law. (The maximum dividends which can be received by the member banks on their stock is 6 per cent.) This is cumulative, but regardless of the amount of net earnings of the reserve banks, the members do not share in the excess. Under the present law all earnings in excess of what is required to pay the 6 per cent dividend are carried to the surplus account. In case a reserve bank should be liquidated, the member banks, after payment of any debts of the reserve bank, would receive back the par value of the stock held, and any remaining assets would become the

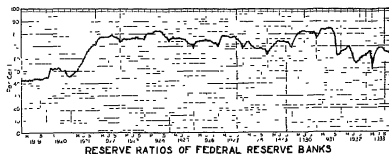
property of the United States Government. Originally the law provided that one half of the net earnings in excess of dividends should go to surplus until it should equal 40 per cent of the paid-in capital. The remainder was to be paid to the government as a franchise tax. In 1919 the law was amended to require that all surplus earnings above dividends were to be carried to surplus until the latter equalled the subscribed capital, and thereafter 10 per cent of such earnings were to go to surplus and 90 per cent to the government. However, the reserve banks were compelled to contribute half of their accumulated surplus to the Federal Deposit Insurance Corporation under the Banking Act of 1933, and the franchise tax requirement was thereupon omitted altogether. Thus we see that the reserve banks have no special incentive to make large earnings. When they have paid their expenses and earned dividends on their stock, they need not be concerned even though part of their cash assets are idle and unused.

Still another important feature is the absence of any requirement for the payment of interest on deposits in the reserve banks and the steadfast refusal of reserve banks to pay interest. This, in itself, frees the reserve banks from an important expense which otherwise might require them to increase their loans beyond the point dictated by prudent central bank policy.

Reserves of the Federal reserve banks. The law requires that the reserve banks maintain minimum reserves against their obligations. These reserves must be 40 per cent of the amount of Federal reserve notes in circulation in the form of gold certificates and 35 per cent of the deposits in the form of lawful money. In order to provide an almost unlimited elasticity for reserve bank operations, in case of crisis the law permits the Board of Governors to waive the reserve requirements for limited periods. This authority of the Board is discussed later in connection with a statement of the Board's powers.

The reserve banks do not rely upon this possibility of

suspension of reserve requirements to provide elasticity. Since the management is free from the necessity of increasing earnings, it is the policy for reserve banks to carry reserves against their own liabilities much in excess of the 35 per cent against deposits and 40 per cent against note issues required by law. The existence of excess reserves



in the reserve banks may be seen in Table XVII and the chart on this page, showing the monthly averages of daily reserves for all reserve banks, expressed in percentages. Although sometimes concealed by gold imports and cyclical influences, the effect of seasonal variations upon the reserve ratios of the Federal reserve banks is distinctly noticeable. The autumn months', the Christmas, and the year-end demands are regularly visible.

TABLE XVII
RESERVE RATIOS OF FEDERAL RESERVE BANKS

	1919	1920	1921	1922	1923	1924	1925	1926
Jan	52.0	44.9	47.5	74.7	75.0	79.2	76.2	72.5
Feb.	43.3	52.5	49.6	76.9	76.1	81.2	77.0	74.1
March	42.7	51.6	50.2	77.6	75.7	80.5	76.4	74.3
April	43.0	52.0	53.8	77.6	76.0	80.5	76.6	74.7
May	42.4	51.8	56.4	77.6	75.9	82.7	76.8	74.9
June	43.3	52.6	59.1	77.8	76.7	82.5	76.3	75.4
July	43.7	50.4	61.7	78.2	76.4	82.6	76.1	74.7
August	43.7	50.0	65.2	79.7	77.6	82.4	75.5	75.0
Sept	43.3	50.4	67.4	78.0	76.4	80.1	73.8	73.6
Oct	43.7	46.8	69.4	76.7	76.1	78.5	72.0	72.8
Nov.	44.7	45.7	71.7	76.1	76.3	77.1	71.6	73.0
Dec.			71.8	73.5	75.6	73.8	68.5	70.0

	1927	1928	1929	1930	1931	1932	1933
Jan.	75.6	71.2	66.8	74.4	79.0	66.5	64.3
Feb.	79.0	74.0	69.4	78.3	83.4	67.4	66.1
March	79.1	73.5	70.3	80.3	84.0	69.7	51.3
April	78.7	71.2	72.7	81.0	83.5	69.3	61.0
May	78.7	69.5	74.4	82.6	84.4	64.8	66.7
June	77.8	68.0	74.5	82.4	84.3	58.4	68.3
July	77.9	68.0	73.8	82.0	84.3	56.3	68.3
August	78.4	68.0	74.2	81.7	81.4	58.2	68.1
Sept	76.5	69.0	73.5	81.4	77.5	60.0	66.7
Oct	75.1	67.6	73.2	81.5	62.6	61.5	65.6
Nov.	72.4	67.7	70.2	81.3	63.1	62.4	64.9
Dec.	68.4	63.6	69.3	76.2	65.2	62.5	63.9

During the years 1919 and 1920 the average reserve ratios of the reserve banks hovered close to the minimum limits set by the law, while reserves of individual banks were frequently impaired. In order to correct this impairment, the reserve banks, under the direction of the Federal Reserve Board, rediscounted and purchased paper from each other, thus effecting an equalization of reserves. In 1919 such rediscounts and purchases of paper amounted to \$2,658,254,000; in 1920 they were \$3,672,792,000; and in 1921, \$999,153,000. In addition, the purchasing and selling of acceptances and United States securities were carried on between banks.

In spite of rediscounting operations between reserve banks, eight banks showed some small deficiency in reserves during the year 1920 and were taxed on the deficiency to the amount of \$24,664.05.³ The scant margin of excess reserves of 1919 and 1920 was the result of the credit expansion involved in postwar government financing and the boom of 1919 to 1920. It is worthy of notice that in spite of the pressure of the boom and the subsequent crisis, the reserve banks were able to supply the country with necessary currency.

Contact of the Federal Reserve Banks with the Money Market

The Federal reserve banks have two important and one unimportant contact with the money market. The im-

³ *Annual Report of the Federal Reserve Board, 1920, p. 46.*

portant contacts are: (1) rediscounting and lending to banks which are eligible to apply to the reserve banks for accommodation; and (2) purchasing and selling various kinds of paper in the open market. The unimportant contact referred to is the power of reserve banks to lend directly to individuals under certain restricted circumstances. Each of these three modes of getting reserve bank funds in the market will be examined in turn.

Direct advances to banks. All banks belonging to the Federal Reserve System are entitled to look to their reserve banks for accommodation in time of need. They may offer eligible paper for rediscount, or they may offer their own promissory notes secured by eligible paper or United States bonds. We need not concern ourselves here with the technicalities of eligibility and the rediscounting process. That is reserved for later study. We are interested, however, in the effect of the rediscounting process upon the reserve bank and the member bank involved.

First, as to the member bank, the rediscounting of eligible paper is a sale of promissory notes and bills of exchange by the member bank to the reserve bank. The discount of the member's own collateral note by the reserve bank is a loan. Since rediscounting or borrowing is made necessary by a depletion of the member's reserves, the payment of the proceeds to the member bank is normally made by adding the amount to the member's reserve account and notifying the member. If the member is in need of currency, the reserve bank may ship currency instead of giving credit on the member's reserve account. In any event the member bank's statement would be affected thus:

Assets:

1. Cash or reserve account increased by the face amount of rediscounted paper (or collateral note) less the discount.

Liabilities:

1. Bills payable and rediscounts increased by full face amount of rediscounted paper or collateral note.

2. Undivided profits (or unearned discounts) reduced by the amount of the discount.

It will be noted that no change is recorded in the loans and discounts of the bank engaging in rediscounting, but liabilities are increased instead. This is desirable because rediscounted paper must be indorsed by the member bank and hence acquires the same characteristics, for all practical purposes, as the member's own note.

The effect on the reserve bank which has rediscounted or lent to the member bank is similar to the effect of a lending operation by any bank. Three changes will probably appear: (1) its assets will be increased by the amount of "bills discounted"; (2) its liabilities will show an increase in deposits of members or Federal reserve notes in circulation; and (3) additions will be made to undivided profits or unearned discounts. As the volume of advances to member banks increases, the liabilities of the reserve bank correspondingly increase, and the ratio of cash reserves to liabilities falls.

Open market operations. Section 14 of the Federal Reserve Act permits the reserve banks to buy and sell in the open market: (1) bills of exchange eligible for rediscount; (2) obligations of the United States, including bonds of not more than six months' maturity of the Home Owners' Loan Corporation and the Federal Farm Mortgage Corporation (which are guaranteed as to principal and interest by the United States); (3) obligations of political subdivisions of the United States having a maturity of not over six months and issued in anticipation of revenue; and (4) acceptances of Federal intermediate credit banks and national agricultural credit corporations. It is important to understand clearly the effect of such transactions upon both the member banks and the reserve banks.

Let us assume that a reserve bank purchases \$1,000,000 worth of government obligations in the bond market and

trace the effects of such a transaction. If the sellers are member banks disposing of part of their holdings of bonds, the transaction is quite simple. The reserve bank will tender drafts against itself in payment. The member banks will present the drafts for payment and receive credit on their reserve accounts. If the sellers are non-member banks, they will likewise receive drafts against the reserve bank in payment and deposit them for credit with city correspondents which are member banks. The non-member banks' reserves will be increased by the amount of the drafts, and the member banks receiving them for collection will again receive the proceeds in credit on their reserve accounts. If the sellers are individuals, their actions will be similar to those of nonmember banks. Eventually member banks will receive the drafts for collection and obtain credit for the proceeds on their reserve accounts. Thus we see that the reserve accounts of member banks may be increased at any time by the purchase of obligations in the open market.

A sale of securities in the open market has just the reverse effect. Let us suppose that the reserve banks sell securities to buyers in the open market, who tender checks on member banks in payment. These checks will be collected by the reserve bank to which they are issued by a deduction from the member's reserve account. It makes no difference whether the purchaser is an individual, a nonmember or a member bank. In the end, settlement is made by deduction from the reserve accounts of member banks.

It is easy to see the importance of the open market transactions of the reserve banks. By the purchase of securities, the reserve banks can take the initiative in increasing member bank reserves. Further, so long as they have securities which may be sold, the reserve banks may reduce the reserve accounts of members. The full significance of this fact must await later discussion of Federal reserve policy.

PRINCIPAL ASSETS AND LIABILITIES OF ALL FEDERAL
RESERVE BANKS, MAY 19, 1937

(In Thousands of Dollars)

<i>Assets</i>		<i>Liabilities</i>	
Gold certificates on hand and due from U S Treasury	8,838,913	F R notes in actual circulation	4,184,425
Redemption fund—		Deposits	
F R notes	11,583	Member bank—	
Other cash	289,155	reserve account	6,918,227
		U S Treasurer—	
Total reserves	9,139,651	general account	116,777
Bills discounted		Foreign bank	126,110
For member banks	15,282	Other deposits	123,933
For nonmember banks, etc			
		Total deposits	7,285,047
Total bills dis-		Ratio of total reserves	
counted	15,282	to deposit and F R	
Bills bought		note liabilities com-	
Payable in dollars	1,404	bined (per cent)	79.7
Payable in foreign currencies	3,071		
Total bills bought	4,475		
Industrial advances	22,523		
U. S Government securities			
Bonds	732,608		
Treasury notes	1,152,213		
Treasury bills	641,469		
Total government securities	2,526,290		
Other reserve bank credit	-3,880		
Total reserve bank credit outstanding	2,564,890		

Direct loans to individuals. Because of the general belief that banks had persistently refused to make loans on good security to solvent businessmen, provision has been made for a limited amount of direct advances by the reserve banks. The details of terms under which such loans can be made will be considered later. It is sufficient here

to observe that advances made directly to individuals by the reserve banks have the effect of increasing member bank reserves during the life of the loans, since the proceeds of such loans will be deposited in a bank.

Rediscounting

In the preceding section we have considered the general effect of rediscount operations upon banks. It is necessary now to examine the details of the rediscounting process.

Who may rediscount. One of the privileges of membership in the Federal Reserve System is the right of a bank to replenish its reserves by rediscounting and borrowing at the reserve bank. Nonmember banks are denied this privilege, although they were allowed to receive the benefits of rediscounting during the World War, when member banks were permitted to rediscount eligible paper received from nonmembers under a special ruling of the Federal Reserve Board. Moreover they were granted an emergency privilege of obtaining advances directly from the reserve banks for a maximum period of one year from March 24, 1933. Federal intermediate credit banks, under regulations prescribed by the Board of Governors, may rediscount eligible agricultural paper with the reserve banks, provided such paper does not bear the indorsement of a nonmember bank eligible for membership.

Application for rediscount. Each application for the rediscount of paper must be accompanied by a formal certificate in which the member states its belief that the paper is eligible, that it has not been acquired from a nonmember bank, and in case of state banks, that the borrower whose paper is offered is not and will not be allowed to become indebted to the bank in excess of an amount which such state bank might lend if it were a national bank.

When a member bank has made application for the rediscount of paper, the responsibility rests upon the reserve bank to determine whether or not the paper is actually

PLEASE READ CAREFULLY THE REVERSE SIDE OF THIS FORM

APPLICATION FOR REDISCOUNT

To the FEDERAL RESERVE BANK OF CHICAGO

Date

19

The _____ Bank of _____ hereby makes application for the rediscount of the above drafts, or bills of exchange listed below aggregating \$ _____ You are authorized to charge to our account at maturity all paper rediscounted by us and to charge to our account at any time hereafter any paper which you may determine multiple or deem indefeasible for any reason.

THE PROCEEDS OF THIS APPLICATION ARE REQUIRED FOR:

1. Deposit Drafts
2. Loan Disbursements
3. Refinancing
4. Redemptions
5. Other Indebtedness

Instructions regarding

Proceeds of Special Comments

The liability of this bank as of this date, for borrowed money exclusive of this offering is as follows:

Redemptions

Bills payable

Certificate of deposit issued for money borrowed

Total

Paper sold without recourse

Total deposits as of this date

Total loans and discounts as of this date

MAKERS AND INDENTURES (All Drawers and Acceptors in Case of Trade Acceptance)	ADDRESS	REFERENCE Indicate Purpose for which Proceeds of each item are used (Give Paragraph 1 of Reverse Side of this Form)	Rate Class (Per cent)	Estimated Due Month (in thousands)	Maturity	Indicate to what bank or banks presented for discount	How This Application Can This Year Old On What Year or No	AMOUNT

Total \$

I certify that the notes, drafts and bills of exchange listed in the foregoing schedule are notes, drafts or bills of exchange which have been issued or drawn or the proceeds of which have been used or are to be used in the first instance in producing, purchasing, carrying or marketing goods (the word "goods" as here used includes goods, wares, merchandise or agricultural products including live stock) in one or more of the States of the United States, or for the purpose of carrying or trading in bonds or notes of the United States. I further certify that none of the notes, drafts, or bills of exchange listed above were acquired from nonmember banks except those which are so designated above, and that this bank has received permission from the Federal Reserve Board to discount with the Federal Reserve Bank this paper acquired from nonmember banks.

I further certify that the above list includes no notes, drafts or bills of exchange of any one borrower who is liable for borrowed money to this bank in an amount greater than ten per centum of the unimpaired capital and surplus of this bank (or any bank made under amended Section 5202 U.S.C.) or who will be entitled to interest thereon in excess of five per centum, while such notes or bills of exchange are under discount with the Federal Reserve Bank, unless in accordance with Section 5202 U.S.C.

(Official Signature) _____ President

eligible under the law and the regulations of the Board. The regulation laid down by the Board covering the matter reads:⁴

⁴ Regulation A (effective October 1, 1937), from Sections 1(h) and 3(a), (b).

Every application by a member bank for the discount of paper or for an advance to such bank must contain a certificate . . . that the paper offered for discount or the security offered for the advance, as the case may be, has not been acquired from a nonmember bank (otherwise than in accordance with section 4 of this regulation) or if so acquired, that the applying member bank has received permission from the Board of Governors of the Federal Reserve System. Every such application shall also contain a notation by the member bank as to whether it has on file a statement which adequately reflects the financial worth of a party primarily liable on the paper offered as security for an advance or for discount or of the person from whom the member bank acquired such paper if such person is legally liable thereon.

A Federal reserve bank shall take such steps as may be necessary to satisfy itself as to the eligibility of any paper offered for rediscount [This] may be evidenced by a statement which . . . [shows] a reasonable excess of quick assets over current liabilities. . . .

Any Federal reserve bank may require that there be filed with it statements, or certified copies thereof, which adequately reflect the financial worth (1) of one or more parties to any note, draft, or bill of exchange offered for discount or to any obligation offered as security for an advance and (2) of any corporation or firms affiliated with or subsidiary to such party or parties. A Federal reserve bank may in any case require such other information as it deems necessary.

Since the Federal reserve banks "may" discount eligible paper, each bank is authorized to determine not only the eligibility of paper offered for rediscount but also its acceptability. Section 4 of the Federal Reserve Act requires the board of directors of each reserve bank to administer its affairs "fairly and impartially and without discrimination in favor of or against any member bank or banks and may, subject to the provisions of law and the orders of the Board of Governors of the Federal Reserve System, extend to each member bank such discounts, advancements, and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks, the maintenance of sound credit conditions, and

the accommodation of commerce, industry and agriculture."

The determination of the acceptability of eligible paper offered for discount by member banks must therefore be made on the basis of:

1. The soundness of the paper itself, which reflects to some extent the value of the member bank's indorsement.
2. The desirability of extending more credit to this particular bank—that is, whether it is using more than its fair share of rediscount facilities.
3. The general business conditions and the probable effect of advances to this bank on general credit conditions. A bank thought to be unduly supporting a speculative movement might be refused accommodation.

Eligible paper. "Eligible paper" may be used as a source of funds either through rediscount or pledge as security for the member bank's own note. Although each reserve bank has the responsibility of determining whether or not paper tendered for rediscount is actually eligible, the basis for that determination is laid down in the law and in the regulations and rulings of the Board of Governors.

There are two standards by which the eligibility of paper for rediscount is to be judged. There is first the question of maturity. Only short-term paper is eligible. Commercial paper, when offered for rediscount, may not be over three months from maturity. Since farmers normally require seasonal loans of longer duration, agricultural paper is eligible for rediscount if its maturity date is not more than nine months distant. The second test of eligibility is the purpose which gives rise to the paper. Paper issued to finance the production, purchase, storage, or marketing of goods is eligible. Thus obligations of businessmen in the form of notes, drafts, and bills of exchange to obtain working capital are eligible. The same is true of paper issued to carry or trade in obligations of the United States Government. On the other hand, the paper is ineligible

for rediscount if the borrowers use their funds to speculate or trade in securities (other than those of the United States) or to speculate in commodities. Likewise, paper of borrowers purchasing fixed assets is ineligible. The notes of speculators on the grain or securities markets, and of farmers using the borrowed funds to pay for land or barns are ineligible for rediscount.⁵

⁵The Federal Reserve Act lays down the following specific rules governing eligibility:

1. Eligible paper consists of notes, drafts, and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been or are to be used for such purposes. The Board is authorized to interpret the application of this rule.

2. Obligations of factors used to make advances to producers of raw agricultural staples are eligible as commercial paper.

3. Paper issued to carry or trade in United States obligations is eligible.

4. Paper issued to carry or trade in securities other than United States obligations is not eligible.

5. Eligible paper must have a definite maturity at the time of discount of not more than ninety days, except that: (a) if drawn or issued for an agricultural purpose, it may have a maturity at the time of discount of not more than nine months; (b) if a banker's acceptance, drawn for agricultural purposes, and secured by documents of title to readily marketable staples, it may have a maturity of not over six months, and (c) sight drafts arising out of domestic shipment or export of non-perishable, readily marketable staples and secured by shipping documents of title may be discounted by the reserve bank for the estimated life of the bill but may not be held more than ninety days.

6. No paper is eligible for rediscount in the hands of a member state bank or trust company if the borrower is indebted to such bank by an amount that would be illegal if such bank were a national bank.

7. Paper of producer-cooperative marketing associations is to be classed as agricultural paper and hence is eligible with maturities up to nine months, if it is used for: (a) loans to members, (b) making payments to members for products delivered, or (c) meeting expenses of grading, processing, packing, or marketing agricultural products.

8. Notes representing loans to finance construction of residential or farm buildings are eligible as commercial paper if accompanied by a binding agreement by a person acceptable to the reserve bank to advance the full amount of the loan upon completion of the building. (Act of June 27, 1934)

The Federal Reserve Board, in Regulation A, has made the following definitions of the nature of eligible and ineligible paper under the law:

1. Eligible paper must bear the indorsement of a member bank when offered for rediscount. It may consist of negotiable notes, drafts, or bills

In spite of very elaborate regulations for determining eligibility, many questions have arisen regarding their application to specific situations and have been submitted to the Federal Reserve Board for an answer. It is unnecessary here to review in detail the rulings made by the Board. It has been stated, however, that the classification of paper may be determined in two ways. (1) If it is issued for or drawn for a commercial or agricultural purpose, its classification is determined by that fact. For

of exchange, which have been issued or drawn, or the proceeds of which have been used or are to be used in (a) producing, purchasing, carrying, or marketing of goods (including agricultural products and livestock) in one or more of the steps of the process of production, manufacture, or distribution, (b) in meeting current operating expenses of a commercial, agricultural, or industrial business, or (c) for the purpose of carrying or trading in direct obligations of the United States.

2 Paper whose proceeds are used for permanent or fixed investment of any kind or for any capital purpose is not eligible

3 Paper whose proceeds are used for investments of a purely speculative character is not eligible

4 Eligibility of paper is not affected by the nature of collateral pledged to insure repayment

5 Paper which is agricultural paper is eligible for rediscount provided it has a maturity at the time of discount of not more than nine months and was issued or drawn, or the proceeds used for

(a) The production of agricultural products,

(b) The marketing of agricultural products, by the growers (or their cooperatives),

(c) The carrying of agricultural products by the growers pending orderly marketing, or

(d) The breeding, raising, fattening, or marketing of livestock

6 Paper of cooperative marketing associations the proceeds of which have been used for organization expenses or to acquire any permanent investment in real estate, warehouses, or the like, is not eligible

7 Paper of factors who re-lend proceeds to producers of raw agricultural staples is eligible if it has a maturity of not over ninety days

8 Bankers' acceptances are eligible when drawn under a credit opened for the purpose of financing

(a) The shipment of goods between the United States and any foreign country, or between the United States and any of its dependencies or insular possessions, or between foreign countries, or between dependencies or insular possessions and foreign countries,

(b) The shipment of goods within the United States, provided shipping documents conveying security title are attached at the time of acceptance, or

(c) The storage in the United States or in any foreign country of

example, drafts drawn on buyers by sellers and notes of buyers given to sellers would arise out of a commercial (or agricultural) transaction. If the buyer who issues the note or upon whom the draft is drawn is engaged in commerce or manufacturing, the paper is commercial because it is issued for or is drawn for a commercial purpose. If the buyer is a farmer, buying things not classified as fixed investments, the paper is agricultural. (2) When the paper is not issued or drawn directly for a certain purpose, as is

readily marketable staples, provided that the bill is secured at the time of acceptance by a warehouse, terminal, or other similar receipt, conveying security title to such staples, issued by a party independent of the customer or issued by a grain elevator or warehouse company duly bonded and licensed and regularly inspected by State or Federal authorities with whom all receipts for such staples and all transfers thereof are registered and without whose consent no staples may be withdrawn; and provided further that the acceptor remains secured throughout the life of the acceptance. In the event that the goods must be withdrawn from storage prior to the maturity of the acceptance or the retirement of the credit, a trust receipt or other similar document covering the goods may be substituted in lieu of the original document, provided that such substitution is conditioned upon a reasonably prompt liquidation of the credit. In order to insure compliance with this condition it should be required, when the original document is released, either (1) that the proceeds of the goods will be applied within a specified time toward a liquidation of the acceptance credit or (2) that a new document, similar to the original one, will be resubstituted within a specified time.

Provided, That acceptances for any one customer in excess of 10 per cent of the capital and surplus of the accepting bank must remain actually secured throughout the life of the acceptance, and in the case of the acceptances of member banks this security must consist of shipping documents, warehouse receipts, or other such documents, or some other actual security growing out of the same transaction as the acceptance, such as documentary drafts, trade acceptances, terminal receipts, or trust receipts which have been issued under such circumstances, and which cover goods of such a character, as to insure at all times a continuance of an effective and lawful lien in favor of the accepting bank, other trust receipts not being considered such actual security if they permit the customer to have access to or control over the goods.

A Federal reserve bank may also discount any bill drawn by a bank or banker in a foreign country or dependency or insular possession of the United States for the purpose of furnishing dollar exchange as provided in Regulation C, provided that it has a maturity at the time of discount of not more than three months, exclusive of days of grace.

9 Under a regulation effective October 1, 1937, a previous exclusion from eligibility of paper whose proceeds are re-lent is omitted. This permits finance company paper to become eligible for rediscount.

the case where the borrower gives his note to his bank, the classification depends upon the use made of the proceeds. If they are used to finance the purchase of goods for resale, the paper is commercial. If proceeds are not to be used to buy goods for resale, the nature of the goods bought will determine the classification. If proceeds are to furnish working capital which can be liquidated out of current income, the paper is commercial. A satisfactory statement of the borrower may indicate this.

The Board has been especially generous in its classification of uses of proceeds of farmers' paper, which are construed to be short time rather than long time in character. For example, notes of farmers used to purchase agricultural implements, including tractors, and livestock (including draft animals and breeding cattle), are classed as agricultural paper and eligible for rediscount if maturing in nine months. Even notes the proceeds of which are used for draining land under cultivation are agricultural paper. If, however, the proceeds of a farmer's note are to be used to purchase a silo, it is to finance a fixed investment, and therefore is not eligible.

The Theory of Eligibility

Under the present rule of eligibility the test applied most generally is (that of liquidity.) This is apparent from the relatively short maturities required and the rule that paper must arise out of, or the proceeds must be used for, facilitating commerce, industry, and agriculture. It seems to be the intent of both the law and the rulings of the Board that eligible paper should generally be self-liquidating in character. The issue is somewhat confused by the difficulties arising from the almost universal use of the single-name promissory note as a credit instrument, whether commercial or other types of credit are needed. This required some method of distinguishing self-liquidating paper from investment paper. The rather clumsy rule

that a satisfactory excess of quick assets over current liabilities may be taken as evidence of the use of proceeds for short-time working capital (which makes the paper properly eligible) has in effect made paper eligible that is not actually self-liquidating. A continuous borrower might show a satisfactory current ratio and his paper may be classed as eligible, but his loans could be liquidated only at the cost of compelling him to shut down.

The eligibility of paper arising out of, or the proceeds of which are used for, trading in United States securities is, of course, not justified by the self-liquidating character of the transaction financed. However, with short maturities, paper secured by United States obligations may be liquidated easily. The wholesale use of "war paper" based upon the sale of Liberty and Victory bond issues of the War could not have been foreseen when the law was originally enacted.

Should eligible paper be self-liquidating? Some writers hold that eligibility should be limited strictly to self-liquidating paper on the grounds that in this way member banks can be encouraged to make more loans on paper of that sort and the reserve banks can be maintained in a liquid and solvent position.⁶ The need for ultimate solvency of banks in general and the Federal reserve banks in particular is obvious. Why, one may ask, is there need for liquidity?

Liquidity has two distinct values in banking assets. Liquid loans of a short-time nature are more likely to be sound loans than nonliquid loans. There is less room for errors in judgment in making a short-time loan than a long-time one. Second, liquidity of a bank, or ability to collect its loans, is necessary if a bank is to meet its obligation to pay out cash at all times. The reserve banks are no exception. They require liquidity of their assets, in

⁶For a particularly partisan defense of strict adherence to the rule of self-liquidation as a test of eligibility, see Willis, H. Parker, *The Theory and Practice of Central Banking*, 1936, pp. 131, et. seq.

part, in order that they may be able to accommodate member banks other than the ones already borrowing. Of course, this is unimportant in times when the unused reserves are very high. However, if loans made by the reserve banks were not liquid and were not repaid, there would be a gradual tendency for the advances of reserve banks to rise as first one and then another bank was accommodated, until unused reserves had disappeared altogether. Moreover, a need for liquidity arises out of the possibility that the reserves of the reserve banks themselves may be depleted by shipments of gold abroad. If such movements of gold brought the reserves of the reserve banks down to the legal minimum, it would be necessary that the volume of accommodation to member banks be reduced in order to restore conditions necessary to elasticity.

But granting that liquidity is necessary for the reserve banks, is there cause for alarm in the fact that much eligible paper is not strictly self-liquidating but represents continuous borrowing by the obligor? Let us raise another question before we seek the answer to the first. According to the view of some people, the amount of eligible paper in the hands of member banks has become dangerously small. Why not, therefore, expand the limits of eligibility to include properly margined and secured stock market paper? It is well agreed that exclusion of such paper from eligibility does not prevent the use in the stock market of funds procured by the rediscounting of commercial paper. (A new regulation now makes such paper eligible as collateral for loans under Section 10b, discussed on p. 259.) The opponents of such a change object that stock market paper is not self-liquidating and therefore would tend to choke the reserve banks with unliquid assets. The proper answer to the above questions may be derived, in part at least, by asking yet another question. What is the essential source of reserve bank liquidity? So far as the paper rediscounted is concerned, short maturity and solvency are essential, but the type of transaction out of which the paper arose is of but secondary importance.

Short maturity is necessary in order that the reserve bank may have an opportunity to demand a reduction in rediscounts at will within a reasonably short period of time. But, in addition to short maturity of the paper offered, true liquidity on the part of a reserve bank arises from its ability to require member banks to reduce rediscounts (or borrowings) at reasonably frequent intervals. It is entirely possible for the reserve banks to make advances to member banks on strictly self-liquidating paper continuously and in such amounts that it would be impossible to compel them to liquidate their borrowings or rediscounts without precipitating a business panic. On the other hand, advances made by reserve banks to member banks to meet their seasonal or incidental needs may have a high degree of liquidity, regardless of the nature of the paper offered for rediscount or security for advances.

Liquidity of the reserve banks depends not so much upon the origin of paper rediscounted, assuming it is sound, as upon the temporary character of the advances to members. If this line of reasoning is sound, the liquidity of the Federal Reserve System is more adequately provided for in the unwritten rule that members are not to remain in debt permanently than in the rules of eligibility.

Borrowing on Collateral Notes

Ordinary borrowing. In addition to rediscounting eligible paper, member banks are permitted to borrow from the reserve banks on their own notes. If commercial or agricultural paper eligible for rediscount or purchase by the reserve bank is offered as collateral, such advances may run for a period not exceeding ninety days. In addition to the use of eligible paper as collateral, member banks may borrow up to fifteen days on the collateral of United States obligations, Federal intermediate credit bank debentures, and Federal Farm Mortgage Corporation bonds and Home Owners' Loan Corporation bonds when guaranteed both as to principal and interest by the United States.

A form of the application for the discount of such notes appears below.

APPLICATION FOR DISCOUNT OF BILLS PAYABLE

To the FEDERAL RESERVE BANK OF CHICAGO

The _____ Bank of _____ Date _____, 19____
hereby makes application
for the discount of enclosed bills payable in the amount of \$ _____.
You are authorized to charge these obligations to our reserve account
at maturity.

THE PROCEEDS OF THIS APPLICATION ARE REQUIRED FOR	{	1 Deposit Decline
		2 Loan Demand
		3 Return { Rediscunts Other Indebtedness

Instructions Regarding
Proceeds or Special Comments {

The liability of this bank at the present time, for borrowed money, exclusive of this application, is as follows

Rediscunts	\$
Bills payable	\$
Certificates of deposit issued for money borrowed	\$
Total	<u>\$</u>
Paper sold without recourse	\$
Total deposits as of this date	\$
Total loans and discounts as of this date	\$
Government securities owned (except those pledged to secure circulation)	\$

Address _____

Bank of
By _____

President
Cashier

The Federal Reserve Act originally made no provision for borrowing by members on their collateral notes. An amendment of September 7, 1916, authorized the reserve banks to make advances to member banks on their notes for a period of not over fifteen days upon collateral consisting of paper eligible for rediscount, or bonds and notes of the United States. This enabled banks temporarily in need of funds to build up their reserves without rediscounting customers' paper. The bank may be reluctant to allow its customers to know it has rediscounted their paper; further, rediscounted paper with a definite maturity date is a less flexible means of obtaining funds than the collateral

note. Banks in cities which hold large volumes of government securities utilize them as collateral in preference to eligible paper. Country banks normally have few government securities and therefore resort to eligible paper collateral.

The 1933 banking law changed the limit on notes secured by eligible paper from fifteen days to ninety days in the interests of country banks whose demand for reserve bank accommodation is likely to extend over a longer period than that of the city banks. This should add to the popularity of this form of accommodation among country banks.

Under the provisions of the 1933 law, any member bank which obtains funds from the reserve bank by means of its collateral note is subject to the rule that, if warned by the reserve bank or the Board against increasing its loans against stocks and bonds, any increase in such loans during the life of its loan at the reserve bank makes the loan immediately due and payable, and the bank loses its right to borrow at the reserve bank for some period designated by the Board.

Relative importance of rediscounting and direct borrowing on collateral notes by member banks. It is significant that collateral notes secured by United States Government obligations are a more important instrument for obtaining credit from the reserve banks than eligible paper. This is clearly shown in Tables XVIII and XIX. The figures cover years when the open market operations of the reserve banks did not swallow up member bank borrowing and rediscounts.

Emergency borrowing. During the banking troubles of 1932 and 1933, member banks in some instances were without sufficient eligible paper to enable them to obtain help from the reserve banks. Two amendments were added in 1932. The first (Section 10a) permits member banks without eligible paper to borrow from the reserve banks by forming groups of five or more. The liability of each bank of the group for funds jointly borrowed is limited to an

TABLE XVIII

TYPES AND ANNUAL VOLUME OF BILLS
DISCOUNTED FOR MEMBER BANKS BY THE FEDERAL RESERVE BANKS*

(Volume of Bills in Thousands of Dollars)

<i>Rediscounts.</i>	<i>1926</i>	<i>1927</i>
Commercial and agricultural paper	\$ 1,938,435	\$ 1,323,977
Demand and sight drafts	12,676	9,076
Bankers' acceptances	175	214
Trade acceptances	20,316	15,897
Paper secured by U S Gov't obligations	13,554	8,986
<i>Member Bank Collateral Notes.</i>		
Secured by U S Gov't obligations	\$28,178,295	\$24,145,934
Secured otherwise	7,518,686	6,430,523
<i>Average Maturity of Bills</i>		
Rediscounted bills	54 28 days.	57 97 days
Collateral notes	5 48 days	5 58 days

* *Annual Report of the Federal Reserve Board, 1927, p. 154*

TABLE XIX

BILLS DISCOUNTED FOR MEMBER BANKS AND HELD BY THE FEDERAL
RESERVE BANKS *

(In Thousands of Dollars)

<i>Rediscounts</i>	<i>December 31, 1927</i>	<i>December 31, 1929</i>
Commercial and agricultural	\$ 87,803	\$170,995
Demand and sight drafts	182	83
Bankers' acceptances . .		31
Trade acceptances	1,400	2,177
Paper secured by U S Gov't obligations	163	755
	<u>\$ 89,548</u>	<u>\$174,041</u>
<i>Collateral Notes.</i>		
Secured by U. S. Gov't obligations	\$417,566	\$352,773
Secured by eligible paper	74,389	105,607

* *Annual Report of the Federal Reserve Board, 1927, p. 138, 1929, p. 132.*

amount equal to the proportion of its deposits to the total deposits of the group. Security for loans advanced to members of the group is provided by the deposit of suitable collateral with a trustee. Another amendment (Section

10b) permitted the reserve banks in exceptional circumstances to make advances directly to members without adequate eligible paper, when secured to the satisfaction of the reserve bank. This right expired in March, 1935.

Borrowing on eligible paper under Section 10b.⁷ This section permits a reserve bank, under regulations of the Board of Governors of the Federal Reserve System, to make advances to member banks upon their demand or time notes having maturities of not over four months, secured to the satisfaction of the Federal reserve bank. Such notes are to bear interest of not less than $\frac{1}{2}$ of 1 per cent above the highest prevailing rediscount rate. Since the cost of this type of advance is greater than the cost of rediscounting or borrowing upon United States bonds or eligible paper, it will be used only in case of necessity. It should remove completely the necessity for group borrowing as permitted by Section 10a.

The latest regulation of the Board of Governors specifically names the types of paper eligible as collateral for advances under this section.⁸ The Board's interpretation of Section 10b very largely nullifies the elaborate rules governing eligibility requirements for rediscounts, since, by the payment of a slightly increased rate, a member is assured of accommodation without regard to whether or not it possesses eligible paper. If advances to members under this section are intelligently made for strictly short-time needs, they will be beneficial. It would, indeed, be most

⁷ This section was added in 1935.

⁸ These types comprise the following

1. Paper otherwise eligible but with a maturity greater than that permitted under the rules of eligibility for rediscount

2. Investment securities

3. Paper arising from security loans made subject to the provisions of Regulation U

4. Mortgages insured under Titles I and II of the National Housing Act

5. Other approved real estate mortgage loans

6. Obligations of the Federal home loan banks and the Federal farm credit institutions, regardless of maturities.

7. General obligations of any state or political subdivision thereof.

8. Installment sale paper.

unfortunate, however, if they should become the means of permanently shifting unliquid assets from member bank portfolios to those of the reserve banks.

Marginal collateral. Reserve banks may and do require marginal collateral against advances to member banks. This is likely to occur when a member is borrowing excessively or when the paper offered is not entirely satisfactory. The extra collateral offered may or may not be, in itself, eligible for rediscount.

The Board of Governors is attempting to minimize the practice of requiring additional collateral. When reserve banks require more than a 25 per cent margin of excess collateral on rediscounts or advances to member banks (except on the collateral of United States obligations), they must explain the reasons in a special report to the Board. Moreover, whenever a member bank offers United States obligations, direct or guaranteed, as collateral for loans at a reserve bank, and receives less than the face value, special explanation must be made by the reserve bank to the Board. Thus, the previously unwritten policy of the Federal Reserve System of making loans on government securities at par, regardless of the market price, is now formally recognized by the Board in its regulations.⁹

Collection of advances to members. When a member has borrowed on its collateral note, the reserve bank charges the amount of the face of the note to the bank's account on the due date. When paper has been rediscounted, it is returned to the member bank at a suitable time before it is due and charged to the member's reserve account on the day it is due. If the paper is payable elsewhere than at the location of the member, the reserve bank will, if instructed, send the paper through its collection system for collection. On the due date the amount is charged to the member's reserve account, and when the proceeds are received by the reserve bank, they are again credited to the member's account.

Direct loans to industry. It was the original intention

⁹ *Regulation A*, Section 3(d), (e).

of the framers of the Federal Reserve Act that the Federal reserve banks should be bankers' banks. Their dealings with the general public were to be limited to the purchase and sale of bills of exchanges and certain types of securities in the open market. The failures of 1931 and 1932 so shattered public confidence in the solvency of banks that bankers generally attempted to increase the liquidity of their assets by loan reductions. Businessmen complained that they were unable to receive accommodation at their banks necessary to finance current trade. In answer to this complaint, the following amendments to the law have provided for direct advances to industry by the reserve banks:

1. Section 13 was amended (July 21, 1932) to permit the Federal Reserve Board (now the Board of Governors), upon a vote of not less than five members, to authorize any Federal reserve bank to discount for individual firms obligations technically eligible for rediscount and satisfactorily secured. The borrowing firm must prove its inability to obtain adequate credit elsewhere.

2. Section 13 was again amended (March 9, 1933) to permit the Federal reserve banks, under regulations of the Board, to make advances to individuals or firms (including banks) for periods of not over ninety days on the security of direct obligations of the United States.

3. Section 13b was added (June 19, 1934) providing that, under authority of the Board, reserve banks may make loans to established industrial or commercial firms unable to obtain necessary credit on a reasonable basis elsewhere. Such loans are for working capital purposes and extend for a period of not over five years. The reserve banks may also purchase or agree to purchase such obligations from any financial institution which agrees to assume at least 20 per cent of any loss which may arise. The gross amount of such loans is limited to the combined surpluses of the reserve banks on July 1, 1934, plus any amount not exceeding \$139,299,557, which might be paid over to the reserve banks by the Secretary of the Treasury.

CHAPTER XVIII

FEDERAL RESERVE SYSTEM (*Continued*)

Federal reserve bank obligations. The outstanding liabilities of the reserve banks are deposits and notes. These obligations originate in the same manner as do those of ordinary banks—namely, from the deposit of cash and the making of loans. Further, they resemble the deposit and note obligations of ordinary banks in another way. To the owners of such obligations they are the equivalent of cash.

It thus happens that the cash resources of ordinary banks are made up mainly of the obligations of the reserve banks; to a lesser extent, silver certificates and United States notes constitute a part of the currency held by banks. Moreover, deposits in banks other than the reserve banks are the equivalent of cash to a depositing bank and are especially important in the case of nonmember banks. However, variations in the cash resources of member banks and currency in hand-to-hand circulation consistently reflect variations in the obligations of the reserve banks.¹

Federal reserve notes. It will be recalled that one of the major defects of the American banking system prior to the establishment of the Federal reserve banks was the inability of banks to meet seasonal currency demands without causing undesirable pressure and disturbance in the

¹ It must be pointed out that this would not necessarily be strictly true if gold movements into or out of the country were operating to affect bank reserves and the law permitted banks to hold gold among their assets.

central money markets. As was pointed out in the discussion of that problem, the ability of the banking system to meet demands for currency and for loans resulting in more deposit credit is dependent not so much upon the form of bank note issue available as upon the existence of adequate excess reserves. The reserve banks, as we have seen, are in a position to hold excess reserves. The effectiveness of these excess reserves in providing currency elasticity is enhanced by the ability to issue notes on a minimum gold certificate reserve of 40 per cent.²

Federal reserve notes are the obligation of the United States Government, and since the act of June 5, 1933 which repealed the gold clause in contracts, they are full legal tender. Further, they are the obligation of the issuing reserve bank. One reserve bank may not pay out the notes of another reserve bank under penalty of a 10 per cent tax. Instead, they must be returned to the issuing bank.

The requirements for Federal reserve note issue are as follows:

1. Application is made by the reserve bank to the Federal reserve agent, who receives notes from the Board of Governors of the Federal Reserve System.

2. The application for notes must be accompanied by a tender of collateral to an amount equal to the notes issued to the reserve bank. This collateral may consist of:

- (a) Notes, drafts, bills of exchange, or acceptances acquired under Section 13 of the Federal Reserve Act. This includes rediscounted eligible paper and collateral notes of member banks secured by eligible paper or government bonds. Such collateral shall not include agricultural paper with a maturity in excess of six months, unless secured by readily marketable staple

² One should notice, however, that this is true only because the reserve banks largely refrain from expanding their credit for other than seasonal and emergency needs of members.

agricultural products or chattel mortgages upon livestock being fattened for market. Advances made by the reserve banks to members under regulations of the Board in accordance with the provisions of Sections 10a and 10b are also not available as collateral for Federal reserve notes.

- (b) Bills of exchange indorsed by a member bank and bankers' acceptances bought in the open market.
- (c) Gold certificates (including gold before January 30, 1934).
- (d) Temporarily, direct obligations of the United States. This privilege was first granted February 27, 1932, and has since been extended by law and presidential proclamation. Under the present law it will expire not later than June 30, 1939.

3. Each reserve bank is required to maintain a reserve in gold certificates of not less than 40 per cent of its notes in *actual circulation*.

- (a) Gold certificates deposited with the agent as collateral may be counted as part of the 40 per cent gold reserve against notes, but not toward the satisfaction of the 35 per cent reserve requirement against deposits.
- (b) Gold certificates deposited with the Board of Governors in the Interdistrict Settlement Fund may be counted as reserve against both note issues and deposits

4. Reserve banks must maintain a redemption fund for Federal reserve notes in the Treasury of the United States. This fund must equal at least 5 per cent of the notes issued without gold certificate collateral and may be counted in satisfaction of the 40 per cent reserve requirement. The Federal reserve agent also maintains a redemption fund with the Treasury against such part of the

Federal reserve notes as are backed by gold certificates in his hands.

5. The Board of Governors may, through the agent, grant or reject an application of a reserve bank for Federal reserve notes. Further, it may levy an interest charge, if it sees fit, on notes issued against collateral other than gold certificates.

Significance of collateral behind Federal reserve notes. It seems to have been the belief of those responsible for the original form of the Federal Reserve Act that currency should be issued only against self-liquidating commercial paper. Thus, it was thought, an automatic elasticity would be introduced into the note issue. In times of active business, member banks would rediscount businessmen's notes, and the reserve banks in turn might use such notes as collateral for currency as needed. A slackening of business, with a consequent decline in loan and currency requirements, would be accompanied by a reduction in rediscounts, a reduction in collateral held against notes, and thus a reduction of note issue. Since the claims of the holders of Federal reserve notes against the issuing banks are prior to all other claims, it is unreasonable to believe that the segregation of collateral against Federal reserve notes was made for the purpose of adding to the security of the notes.

However, the faith in the segregation of special collateral as a device for insuring the existence of the *right* amount of Federal reserve notes has been weakened, particularly with the gradual expansion of paper eligible for use as collateral. On September 7, 1916, member banks were authorized to borrow at the reserve banks on their own fifteen-day notes secured by eligible paper or United States bonds. This paper was not made eligible as collateral for note issue until June 21, 1917. In the meantime, the 1916 amendment made available as collateral bills of exchange indorsed by member banks and bought in the open market by the reserve banks. The amendment of 1917 provided

that not only collateral notes of member banks, but also gold and gold certificates might be used as collateral for Federal reserve notes. At present the most ardent believers in the efficacy of securing bank notes by commercial paper collateral must seriously question the genuine importance of collateral requirements under the existing law.

At times the collateral requirements have proved embarrassing to the Board of Governors in the execution of its credit policy. The best example of this arose in 1931 and 1932. At that time the Board was following a policy of building up the reserves of member banks through reserve bank purchases of government bonds in the open market. As a result of this and the declining demands for bank credit, borrowing and rediscounting by member banks had fallen to a point of relative insignificance. The reserve banks were therefore without discounted paper eligible to be used as collateral for Federal reserve notes and were compelled to resort to the use of gold and gold certificates. The "free gold" (that part of the gold holdings which was not being utilized as note collateral and required reserve against deposit and note liabilities) was thus reduced. Any considerable demand for gold for export or hoarding depleted the free gold to the danger point. Under these circumstances it was feared that the reserve banks would be compelled to reverse their open market operations, sell bonds, and force member banks to rediscount in order that collateral for note issue in substitution for gold might be obtained. This difficulty led to the temporary provision that the Board of Governors might permit reserve banks to offer direct obligations of the United States as collateral. By so doing the reserve banks may continue to ease the money market by purchasing and holding securities in the face of a drain of gold. There seems to be no good reason for not making this privilege a permanent one, unless the still more sensible plan of complete abolition of collateral requirements against Federal reserve notes should be adopted.

Federal reserve bank notes In addition to the issue of Federal reserve notes, the reserve banks were originally permitted to issue a bond-secured note similar to the notes of national banks. The occasion for this arose out of the expectation that national banks, freed by the new act from the necessity of maintaining in the Treasury a deposit of government bonds bearing the circulation privilege, would wish to dispose of these bonds and reduce their circulation. To facilitate this the reserve banks were authorized to purchase not over \$25,000,000 of the bonds annually. The reserve banks were given the option of converting these bonds, which bore 2 per cent interest, into other United States obligations without the circulation privilege or of using them as a basis for Federal reserve bank notes in the same manner as did national banks. Actually the bonds so sold to the reserve banks were unimportant, and the issue of Federal reserve bank notes was correspondingly small. However, at two particular times Federal reserve bank notes came into use in a manner not intended by the original law.

In 1918 Congress passed the Pittman Act, which provided for the sale of \$350,000,000 of silver dollars as bullion and the withdrawal of a corresponding amount of silver certificates. To fill the gap in the circulating medium without forcing an extra burden upon their reserves, the reserve banks were authorized to issue Federal reserve bank notes to an amount equal to the silver dollars sold as bullion upon deposit of United States certificates of indebtedness or one-year gold notes with the Treasurer of the United States. The law provided for the repurchase of domestic silver at \$1 per ounce to an amount sufficient to replace that originally melted and sold. The Federal reserve bank notes were to be retired as silver was rebought and coined. The maximum volume of Federal reserve bank notes outstanding under this law was \$261,039,000. The repurchase of silver and the retirement of the notes was completed in the early 1920's. By the end of 1922

Federal reserve notes in circulation were reduced to \$2,770,000

The second important occasion for the use of Federal reserve bank notes arose in connection with the banking holiday of March, 1933. At that time all of the banks were closed by presidential proclamation in order to stop the rapidly increasing panic and bank failures. The problem of reopening the solvent banks involved not only the determination of which banks should be opened, but also the method to be used to assure the possibility of meeting any renewed public demand for currency in exchange for bank deposits. The matter was handled by: (1) giving all banks, both member and nonmember, the right to borrow on adequate security from the reserve banks during the emergency; and (2) authorizing the reserve banks to issue Federal reserve bank notes upon the security of any United States bonds or upon any notes, drafts, or bills of exchange acquired under the law and deposited with the Treasurer. These notes could be issued to the full face value of United States obligations and to 90 per cent of the value of other paper. Thus there was available an almost limitless supply of currency for the reopened banks to meet any public demand for currency on their reopening. The Federal reserve bank notes were especially appropriate for emergency currency. The fact that they were the obligation of the reserve banks, and legal tender, guaranteed their acceptability; they required no gold reserve and their quantity was thus limited only by the volume of paper which found its way into the reserve banks. This privilege expired with the passing of the emergency. However, the reopening of the banks was not accompanied by an increase in hoarding, and the use of this emergency form of Federal reserve bank notes was unnecessary. The high point in the issue was in December, 1933, when it reached \$208,000,000.

The only two issues of United States bonds bearing the circulation privilege were called for redemption July 1 and

August 1, 1935* With their retirement and the expiration of the emergency provisions described above, the possibility of further issues of Federal reserve notes under the existing law is at an end.

Federal Reserve Bank Management

The boards of directors of the Federal reserve banks. Each of the twelve Federal reserve banks is directly under the management of a board of nine directors. These directors are divided into three classes. Class *A* directors, three in number, are representatives of the member banks of the district and are chosen from the ranks of the bankers themselves. Class *B* directors, also three in number, are persons actively engaged in business other than banking. Both Class *A* and Class *B* directors are elected by the member banks. For purposes of such election, the Board of Governors classifies member banks of each district into three groups according to size (large banks, middle-sized banks, and small banks), and the banks of each group elect one Class *A* and one Class *B* director. Any member bank may nominate a candidate for each class. Each member has one vote, with the limitation that only one member may have the privilege of nominating and voting for directors when two or more member banks in one Federal reserve district are affiliated with the same holding company. The remaining three of the nine directors are appointed by the Board of Governors of the Federal Reserve System and are known as Class *C* directors. One director, who must be a person of "tested banking experience," is designated as Federal reserve agent and chairman of the board. He is the official representative of the Board of Governors in all deliberations on the affairs of the reserve bank. Another director from Class *C* is named deputy chairman. The Federal reserve agent appoints such assistants as seem necessary

* *Federal Reserve Bulletin*, July, 1935, p. 413.

The chief executive officer, responsible for the actual administration of the affairs of a reserve bank, is the president. The president and vice-president are appointed by the board of directors of a reserve bank for a term of five years, subject to the approval of the Board of Governors. Previous to the Banking Act of 1935, the board of directors appointed an executive officer commonly known as the governor of the bank. The new arrangement strengthens the hand of the central authority, the Board of Governors, in its management of each reserve bank, since it may indicate its approval or disapproval of a president of a particular reserve bank every five years.

Management of Federal reserve bank branches. The Board of Governors is authorized to permit or require reserve banks to establish branches within their respective districts, each branch to be managed by a board of directors of not more than seven, nor less than three. A majority of one is appointed by the reserve bank and the remainder by the Board of Governors.

✓ **The Board of Governors.** Under the 1935 amendments to the Federal Reserve Act, the chief executive body of the Federal Reserve System is now called the Board of Governors of the Federal Reserve System, instead of the Federal Reserve Board as it was previously designated. Its membership is made up of seven appointees of the President, who are approved by the Senate. Not more than one member may be appointed from any one district, and "the President shall have due regard to a fair representation of the financial, agricultural, and commercial interests and geographical divisions of the country." Appointments hold for fourteen years, and the terms are so arranged that the term of only one member will expire during any two-year period. Members are not eligible to reappointment, nor may they resign their positions before the end of their term and accept any position with a member bank within two years. Two members are appointed as chairman and vice-chairman, respectively, for four-year periods.

The one designated as chairman is the chief executive officer.

The new organization of the Board became effective February 1, 1936. Besides involving a reduction in numbers from eight to seven, it divorces the Board of Governors from the fiscal policies of the Federal Government by depriving the Secretary of the Treasury and the Comptroller of the Currency of their membership, which they previously held *ex officio*. This change has long been desired by those who felt that credit policies of the banking system should not be made subservient to the fiscal needs of the government or to the political necessities of the existing administration. It seems doubtful that it will ever be possible to prevent credit policies of the Board of Governors from being influenced by the Government's needs in time of war or other emergency, if indeed it would be desirable to do so. However, the change makes for a desirable enhancement of independence of the Board of Governors.

Powers of the Board of Governors. Many of the powers of the Board of Governors have been mentioned in connection with the particular banking functions to which they apply. Although it is unnecessary to repeat all of these powers here, certain powers pertaining to the general management of the Federal Reserve System must be considered.

1 Each Federal bank has the power to establish rates of discount on each class of paper, with "a view of accommodating commerce and business." Such rates are established every fourteen days, or oftener if the Board of Governors desires it, and are subject "to review and determination" of the Board. The requirement that rediscount rates be set every fourteen days, or oftener, was added in 1935 to increase the authority of the Board over rediscount rates. Previously the Board had no real power to compel reserve banks to change their rates. Now, since new rates must be set at least every two weeks, the

Board is in a position to control them by virtue of its veto power.

2. The Board of Governors may, in its discretion, examine the affairs of each reserve bank and member bank. It shall publish weekly statements of the condition of each reserve bank.

3. By a vote of five members, the Board may require Federal reserve banks to rediscount for one another.

4. The Board of Governors may suspend, for a period not to exceed thirty days, plus renewals for fifteen days, any of the reserve requirements specified in the Federal Reserve Act, provided a graduated tax is placed upon the deficiencies allowed. This power includes, obviously, authority to suspend the reserve requirements for members as well as for the reserve banks. However, the power to suspend reserve requirements of member banks has never been used, and it is unlikely that any need for such suspension will arise. Member banks in general may be relieved of reserve shortage either by rediscounting or obtaining other direct advances from the reserve banks or through the expansion of open market purchases of United States obligations by the reserve banks. The plight of particular members who find themselves short of reserve, with no assets on which to obtain more, is not likely to provoke use of such sweeping powers as a general suspension of member bank reserve requirements, particularly under the liberalized rediscounting and borrowing provisions of the law. The Board may vary legal reserve requirements for member banks between a lower limit fixed by the statutory amount and twice that amount.

The power to suspend reserve requirements of the reserve banks is qualified by the statutory requirement that, in case the gold certificate reserve held against Federal reserve notes falls below 40 per cent, the Board shall establish a graduated tax. This tax shall be 1 per cent per annum upon such deficiency so long as reserves are not less than 32½ per cent. Below this figure, each additional

deficiency of $2\frac{1}{2}$ per cent bears an extra tax of not less than $1\frac{1}{2}$ per cent. This tax is paid by the reserve bank but is passed on to members by being added to the rates charged members for rediscounts and advances.⁴

5. The Board may suspend or remove any officer or director of any Federal reserve bank and may require reserve banks to write off doubtful or worthless assets. Further, it may suspend, for violation of the law, the operations of any reserve bank

6. The Board is required to make an annual report to Congress. Under the amendments of the 1935 act, this report must include a full account of its actions and those of the Open Market Committee on all questions relating to open market and credit policies.

The Open Market Committee. The Open Market Committee consists of twelve members, seven of which are members of the Board of Governors. The other five are chosen by the reserve banks in such a manner that one represents the reserve banks of New York and Boston, one the reserve banks of Philadelphia and Cleveland, one the reserve banks of Chicago and St. Louis, one the reserve banks of Richmond, Atlanta, and Dallas, and one the reserve banks of Minneapolis, Kansas City, and San Francisco.

It is evident that the Board of Governors may, if it acts as a body, completely dominate the actions of the Committee. Since it is unlikely that such unity of action will ever materialize, the representatives of the reserve banks may be expected to play an important part in the Committee's decisions. The 1935 act puts the Open Market Committee absolutely in control of the open market operations of the reserve banks, since none "shall engage or decline to engage in open market operations under section

⁴This graduated tax is not to apply to deficiencies in reserves arising from an expansion in open market purchases of bonds which might occur under Section 43 of the act approved May 12, 1933 (the inflation rider of the Agricultural Adjustment Act)

fourteen of this act except in accordance with the direction of and regulations adopted by the Committee." The actions of the Committee are to be "governed with a view to accommodating commerce and business and with regard to their bearing upon the general credit situation of the country."

The open market operations of the reserve banks have always been subject to the "rules and regulations" of the Board, but the original act provided no machinery for centralized control of this important function. Originally the open market operations were intended mainly for the purpose of supporting and developing the market for bankers' acceptances and treasury bills and to provide the reserve banks with earning assets. Each reserve bank made its purchases and sales in the open market independently. Later, the need for some coördination in such matters appeared, with the result that in 1922 an informal committee was formed consisting of the governors of the five largest reserve banks. This committee at first undertook merely to coördinate the actual purchase and sales of government securities. In October of the same year, it undertook to make recommendations in regard to open market transactions.⁵

In 1923 the Board set up an open market investment committee, consisting of the same members as the old committee, with the duty of recommending open market operations to the Board and to the reserve banks, and to execute them through the open market investment account.⁶ Purchases were made in the open market and prorated among the several reserve banks in amounts previously agreed upon by such banks.

The act of 1933 created a Federal Open Market Committee, consisting of one representative of each Federal reserve bank, to confer with the Board and to execute open

⁵ Burgess, W. Randolph, *The Reserve Banks and the Money Market*, 1927, first edition, pp. 216-217.

⁶ *Ibid.*, pp. 219-220.

market policies as determined by the Board. Participation in open market operations was at that time still optional with the individual reserve banks. It was not until 1935 that participation was made compulsory.

The Federal Advisory Council. The board of directors of each Federal reserve bank annually choose one representative for membership on the Federal Advisory Council. This Council meets in Washington four times a year, or oftener, at its own option or upon the call of the Board of Governors. It has the power to confer with the Board on general business conditions and to advise the Board on general matters of policy.⁷ Since the Council is without any real authority, it is impossible to measure its effectiveness, but its membership contains some of the best informed and most experienced bankers in the respective districts represented and must, therefore, be of considerable value to the Board.

State Bank Membership

When the Federal Reserve System was organized, national banks were required, on penalty of loss of charter, to become members and subscribe to stock in the Federal reserve banks. State banks, however, were not subject to this compulsion, and they quite generally refrained from joining. As late as December 31, 1916, only thirty-seven state banks were reported as members.

In addition to the natural conservatism of bankers, which led them to avoid joining the yet untried system, there were some definite objections to state bank membership at the time. The original Federal Reserve Act provided for membership by state banks under the conditions that: ⁸

1. Their paid-up unimpaired capital be sufficient to

⁷ Federal Reserve Act, Section 12

⁸ Federal Reserve Act, Section 9, as enacted December 23, 1913.

entitle them to become national banks in the location where situated.

2. They be issued a permit by the Federal Reserve Board.

3. They conform to the reserve requirements of the Act.

4. They conform to the provisions of the law imposed upon national banks as to:

(a) The size of individual loans.

(b) The prohibition against the purchase of or loans on the bank's own stock.

(c) The impairment of capital.

(d) The payment of unearned dividends.

5. They conform to any rules and regulations set up by the Board.

6. They make reports to the Comptroller in the same manner as national banks and submit to examination by the Comptroller and by the Federal reserve bank or the Board at the option of the examining authorities.

These restrictions were objectionable to most state banks. In many states the limit on individual loans was more lenient than the national bank limit. At first, the reserve requirements of the Federal Reserve System did not satisfy state reserve requirements. Further, the possibility of examination by the Comptroller of the Currency and the representatives of the Federal reserve banks, in addition to examination by state authorities, was not attractive, even though in practice the national bank examiners never did examine state member banks.⁹ The final omnibus authority of the Federal Reserve Board to formulate rules and regulations under which state member banks might operate was so uncertain that state banks doubted the advisability of joining the Federal Reserve System. Moreover, once they were in the System, there was no statutory provision for their voluntary withdrawal. This omission

⁹ Federal Reserve Bank of Richmond, "State Bank Membership," *Letter No. 14*, December, 1923, p. 8.

was considered a serious drawback in spite of the Board's regulation permitting termination of state bank membership upon written notice twelve months before the date of withdrawal¹⁰

State bank membership during the War. The entry of the United States into the World War early in 1917 and the resultant pressure for financing the governmental requirements made it important that the banking structure be strengthened by bringing into the Federal reserve fold a substantial part of the nonmember state banks. To this end the amendments of the Federal Reserve Act of June 21, 1917, clarified and ameliorated the state bank membership requirements. More specifically the amendments provided that

1. Subject to the provisions of the Act and the regulations of the Board, state banks and trust companies, on becoming members, might retain their full charter and statutory rights and might continue to exercise all corporate powers granted to them by their charters.

2. Reserve banks might rediscount for state member banks only the paper of borrowers who were in debt to the bank by an amount not over 10 per cent of the banks' capital and surplus. This limit did not apply to bills of exchange and paper owned by the borrower and subsequently discounted by him at the bank. The old requirements that state members should conform to the national bank rule regarding the size of individual loans was thus abandoned for all paper except that offered for rediscount.

3. State members should make at least three annual reports to the Federal reserve banks instead of to the Comptroller of the Currency as the old law required.

4. State member banks should not be subject to examination by the Comptroller as in the original law.

5. State member banks might withdraw from membership in the System after six months' written notice.

¹⁰ *Ibid*, p. 7

In addition to the improvements made in the law as a means of encouraging the admission of state banks to the System, pressure was put upon them to join as a matter of patriotic duty. President Wilson called attention to the modifications in the law and urged that all banks able to qualify as members should join the System. From June 21, when the law was amended, until the end of 1917, membership among state-chartered banks increased from 53 to 250, while the resources of the state member banks increased from \$825,000,000 to \$5,000,000,000.¹¹ By the end of 1918 state bank members numbered 930, with resources of \$7,482,000,000, and by the end of 1920 they numbered 1,487, with resources of \$10,370,253,000.

State bank membership after the War. Subsequent legislation further increased the attractiveness of membership. In 1922 the rules governing the right of state members to rediscount were modified to permit the rediscounting of eligible paper of borrowers who were not in debt by an amount greater than that which would have been legal if the state bank were a national bank. This put the state member banks on a par with the nationals. In 1923 the law was amended to permit state banks to join the system if they had a paid-up and unpaired capital of 60 per cent of the amount necessary to become a national bank in the same location. Banks joining under this provision were required to set aside, as additions to capital, at least 20 per cent of their net income each year, and to conform to regulations set up by the Federal Reserve Board. The Board ruled that such banks should increase their capital to the full required amount within five years and should set aside 50 per cent of the annual net earnings or all net earnings above 6 per cent of the capital for this purpose.¹² The reduction in capital requirements for membership was made to attract the smaller country state banks, many of which possessed less than the required capital.

¹¹ *Ibid.*, pp. 15-17

¹² *Regulation H*, Series of 1928, Section I.

Present status of state bank membership. The Banking Act of 1933 introduced further changes into the state bank membership situation. It restored the original requirement that state banks should possess as much capital as is required of national banks similarly located. An exception was made in the case of existing state banks having a capital of \$25,000 in places with a population of not over 3,000. The reason for this exception lay in the fact that the 1933 law increased the capital requirements for the establishment of new national banks in such places to \$50,000. To have required established state banks to meet this new capital requirement as a price for membership would have been discriminatory, since established national banks were not required to do so. This act also provided for the admission to membership of any bank, including Morris Plan banks and mutual savings banks. This departure from the old practice of limiting membership to regular banking institutions necessarily followed from the Federal deposit insurance requirement that all insured banks become members of the Federal Reserve System by July 1, 1936.

The 1935 banking act modified the original requirement that deposit insurance be dependent upon membership in the Federal Reserve System. As the law now stands, all institutions not engaged in commercial banking business are freed from the membership requirement. Hence, insured Morris Plan banks and savings banks need not join. Beginning with July 1, 1942, however, all banks which have average yearly deposits of \$1,000,000 or more must become members if they are to participate in the benefits of deposit insurance.

Advantages of state bank membership. Two main reasons have been advanced for urging or even compelling state banks to become members of the Federal Reserve System. First, the banks themselves are benefited by having access to the lending power of the reserve banks in time of temporary seasonal need or emergency need for

funds. Second, the banking system as a whole, it is claimed, will be strengthened by bringing the state banks under the control of the reserve banks. Thus a degree of uniformity of regulation and control is made possible in spite of the diversity resulting from Federal and state charters.

In respect to the first argument, one must admit the usefulness of membership to the more active commercial banks. Accommodation of commercial customers often requires an extension of credit which results in a deficiency of reserves. Unless the bank carries ample secondary reserves other than rediscountable paper, reserve bank accommodation is important. In the past, membership for banks without a large amount of active commercial business was of little practical importance except for its prestige value.

Such banks in normal times had little occasion to rediscount, since they were in a position to make new loans only as unused reserves appeared. Their deposits were not of a volatile nature and therefore not likely to cause a heavy demand for cash on short notice. In fact, small members frequently made no use of their rediscount privileges. The doubtful nature of membership advantages was accentuated by the fact that such banks had little paper eligible for rediscount or usable as collateral for direct borrowing.

During the last few years the situation has changed to some extent. The danger of depositors' runs made the rediscount privilege more vital as bank failures shattered public confidence. This reason for membership has been largely lost, however, with the advent of deposit insurance. The 1935 banking act permits borrowing by member banks on collateral notes satisfactorily secured. This renders membership more useful than before because it makes the rediscount services of the reserve bank available to any member with sound assets, whether or not these be technically "eligible."

The second argument for membership is a more doubtful

one. There is little evidence that the members of the Federal Reserve System, as such, have been more carefully regulated than the nonmember banks. State bank members in the past have not been subjected to any careful scrutiny by the reserve bank authorities. Instead, the state bank examinations were normally accepted as sufficient to satisfy the reserve bank requirements, so long as nothing radically wrong appeared. In 1934 the Board stated that the examinations of state member banks made under the provisions of the Federal Reserve Act are made by examiners for the reserve banks, approved by the Board. These examiners, working under the direction of the Federal reserve agent, examine each state member bank at least once each calendar year, either independently or jointly with state banking authorities.¹³

Objections to membership. In spite of the modifications of the rules governing membership mentioned above, state banks have quite generally refrained from joining the System. This has been particularly true of the banks in smaller towns. The objections to membership voiced by such banks may be summarized as follows.

1. In many instances conformance with the minimum capital requirements is difficult.

2. Member banks must necessarily participate in par collection and refrain from making exchange charges on checks presented through the mails. In 1935 there were 2,694 state banks on the nonpar list.

3. Before 1933 nonmember banks carried their legal reserve balances, in part at least, as deposits with their city correspondents, who paid interest on such balances. The reserve banks have never paid interest on member bank balances deposited with them. Under the 1933 banking act all member banks are prohibited from paying interest on demand deposits. Since city correspondents are nor-

¹³ *Annual Report of the Federal Reserve Board, 1934*, p. 54

TABLE XX
NUMBER OF MEMBER AND NONMEMBER BANKS*

Date	MEMBER BANKS				NONMEMBER BANKS	
	Total	Total	National	State	Mutual Savings	Others
	All Banks					
June 23, 1915	26,605	7,614	7,597	17	639	18,352
June 20, 1917	27,495	7,652	7,599	53	632	19,211
June 30, 1919	28,600	8,821	7,779	1,042	633	19,146
June 30, 1921	30,560	9,745	8,150	1,595	634	20,181
June 30, 1923	29,833	9,856	8,236	1,620	628	19,349
Dec 31, 1925	28,257	9,489	8,048	1,441	621	18,147
Dec 31, 1927	26,416	9,034	7,759	1,275	618	16,764
Dec 31, 1929	24,630	8,522	7,403	1,119	609	15,499
Dec 31, 1931	19,966	7,248	6,368	878	597	12,123
Dec. 31, 1933	15,011	6,011	5,154	857	579	8,421
Dec. 31, 1934	16,042	6,442	5,462	980	579	9,021
Dec 31, 1935	15,837	6,387	5,386	1,001	570	8,880
Dec 31, 1936	15,628	6,376	5,325	1,051	565	8,687

* Annual Reports of the Federal Reserve Board

TABLE XXI
DEPOSITS OTHER THAN INTERBANK DEPOSITS, OF MEMBER AND
NONMEMBER BANKS *
(In Millions of Dollars)

Date	MEMBER BANKS				NONMEMBER BANKS	
	Total	Total	National	State	Mutual Savings	Others
	All Banks					
June 23, 1915	19,131	6,678	6,608	68	3,951	8,502
June 20, 1917	26,352	10,301	9,742	559	4,422	11,630
June 30, 1919	33,603	19,170	12,951	6,219	4,751	9,682
June 30, 1921	35,742	20,637	12,991	7,646	5,575	9,529
June 30, 1923	40,688	23,871	14,490	9,380	6,295	10,522
Dec 31, 1925	49,224	30,029	18,066	11,964	7,298	11,897
Dec 31, 1927	52,909	32,063	19,662	12,401	8,344	12,502
Dec. 31, 1929	55,289	33,865	20,290	13,575	8,916	12,508
Dec 31, 1931	45,821	27,432	17,271	10,161	10,105	8,284
Dec. 31, 1933	38,505	23,771	15,386	8,385	9,708	5,026
Dec 31, 1934	44,771	28,943	18,519	10,424	9,828	6,000
Dec 31, 1935	48,964	32,159	20,886	11,273	9,963	6,842
Dec. 31, 1936	53,701	35,893	23,107	12,786	10,143	7,666

* Annual Reports of the Federal Reserve Board.

mally members, the objection that membership results in a loss of interest on reserve balances has lost its validity.

4. Members must invest an amount equal to 3 per cent of their capital and surplus in the stock of the reserve bank. This bears only 6 per cent cumulative dividends, and banks have sometimes complained of the modest size of this return.

In the face of these objections to membership, the advantages seem unimportant to many of the smaller banks. They quite properly hold that the large city correspondent can normally furnish exactly as good service in the way of rediscounting, lending, and the collection of checks at par as can the reserve banks. Besides, a city correspondent can hardly be dispensed with merely because a bank becomes a member of the Federal Reserve System. Participation in the call loan market or the sale of foreign exchange drafts, for example, requires city correspondent relations. Even the execution of member banks' orders for securities and commercial paper seems not to fall within the scope of the reserve banks' authority and requires the services of city correspondents.¹⁴

¹⁴ Willis, H. Parker, and Steiner, William H., *Federal Reserve Banking Practice*, 1926, pp. 102-104. This encyclopedic work on the Federal Reserve System makes available a vast amount of detailed information on reserve bank operations.

CHAPTER XIX

FEDERAL RESERVE CREDIT POLICY

A bank's credit policy is concerned with the process of making loans and involves the question of the volume and the nature of loans. The volume is necessarily determined in the light both of available reserves and the need for cash assets. The type of loan depends, within legal restrictions, upon the judgment of the banker and upon the borrowers available.

Central banks, like any other, necessarily have a credit policy which involves both the quantity and the quality of loans. The credit policy of central banks, however, is of particular social importance because central bank loans directly affect the volume of cash and cash reserves of other banks, thus determining to a considerable measure the power of the banking system as a whole to expand its loans. This arises from the fact that central bank obligations, whether in the form of notes or deposits, are the equivalent of cash to the other banks and to the public. Thus an expansion of central bank loans gives rise to new deposit and note obligations and, in turn, to more reserves in other banks. This is true whether the central bank lends exclusively in the open market, or both in the open market and to the other banks, as do the Federal reserve banks. It is, of course, obvious that it matters little just what form the central bank loans take so far as the effect on cash reserves of other banks is concerned. They may consist of

the purchase of bonds, loans to businessmen, or the rediscount of paper for other banks.

Central banks cannot be said to control absolutely the volume of cash reserves of the other banks. For example, between January 31, 1934, when the American dollar was stabilized at its present gold content, and February 1, 1936, America imported approximately \$2,750,000,000 in gold, which came through the hands of member banks and increased their reserves accordingly with no change in the volume of reserve bank credit. Likewise, a reversal of the inward flow of gold causes a reduction in member bank reserves. Changes in the public demand for currency in circulation cause similar changes in bank reserves.

Primary and secondary credit expansion. That volume of bank credit which banks extend on the basis of reserves of cash assets not arising from the loan and investment operations of the central bank is often referred to as primary expansion. Thus, if the reserve banks were completely out of the market, holding only cash assets, the member and nonmember bank loans would constitute the primary expansion. On the other hand, if the reserve banks were to lend \$1,000,000,000 and increase the cash reserves of member banks by that amount, and the member banks expanded their loans appropriately, the new bank credit resulting would be secondary expansion.

It is only the secondary expansion of member and non-member bank credit which the central banks can control by the exercise of their credit policies. This explains the desire of the reserve banks to keep in touch with the money market at all times. They may do this by encouraging the banks to build up the general level of their loans and deposits to the point where they are obliged to rely partially upon reserve bank credit. Such contact is difficult to maintain in times of heavy gold imports such as America has experienced from time to time since the War. The situation early in 1936 is a good case in point. In spite of the \$2,400,000,000 in government securities owned by the

reserve banks, they were essentially out of contact with the money market by virtue of the fact that member bank excess reserves were about \$3,000,000,000. Had the reserve banks sold all of their securities and withdrawn completely from the money market, member bank reserves would still have been substantially in excess of requirements.

A new weapon of control has been put into the hands of the reserve banks by the Banking Act of 1935, which permits the Board of Governors to vary the legal reserve requirements for member banks in reserve and central reserve cities or for all member banks. The bottom limit is the prescribed reserves found in the Federal Reserve Act, while the maximum which the Board may set is twice that amount. It follows that the reserve banks can now establish contact with the money market more easily than before, through this power to raise reserve requirements until members are forced to rediscount.

Methods of Control

Power to control the volume of member and non-member bank credit. We have seen that the reserve banks are able to exercise control over the volume of bank credit only through their control of secondary credit expansion and that this necessitates maintenance of contact with the money market. There still remains the problem of the extent of their control over secondary credit expansion when this contact is maintained.

The whole question of the effectiveness of the attempts of reserve banks at credit control is complicated by the fact that the reserve banks are essentially lenders of last resort for the whole banking system. This means that the reserve banks are expected to lend: (1) directly to members (through rediscounting or on collateral notes); and (2) to dealers and others through the purchase of eligible bills and Treasury obligations in the open market. This expectation arises from the normal rights of membership on the one hand and the attempt to develop and maintain a

bill market on the other. It follows that neither can be restricted unduly in the pursuit of credit policy. It also follows that the reserve banks must rely, for the most part, upon some form of persuasion to check applications of banks and dealers for accommodations rather than upon outright refusals.

Checks upon applications for reserve credit. These checks are primarily found in the ability of reserve banks to vary the cost of their credit by changing their rediscount and open market buying rates. If the rates are made sufficiently high, they will have the effect of reducing applications for accommodations and in turn limiting reserve bank credit. Another check exists in the form of a banking taboo against continuous borrowing by member banks at the reserve banks. To the extent that this operates, banks will attempt to rediscount only for seasonal or emergency needs, being careful not to expand the whole scale of their operations upon borrowed reserves. A third check takes the form of "moral suasion." This is designed to prevent the expansion of bank credit for use in undesirable fields on borrowed reserves. A fourth check is the absolute one arising from the right of the Board and the reserve banks to withdraw rediscount and borrowing privileges from member banks which make undue use of bank credit for the "speculative carrying of or trading in securities, real estate, or commodities, or for any other purpose inconsistent with the maintenance of sound credit conditions."¹ This check is in direct opposition to the position of the reserve banks as lenders of last resort and can be expected to be used charily, if at all. Fifth, the reserve bank can exercise discretion in determining the advisability of making advances to member banks in any particular instance. This arises not only from its privilege of deciding when eligible paper is "acceptable," but also from its duty of extending credit "with due regard for the claims and demands of other

¹ Federal Reserve Act, Section 4.

member banks, the maintenance of sound credit condition and the accommodation of commerce, industry, and agriculture." ²

Methods of control of the volume of rediscounting. Since the Federal reserve banks hold the important position of lenders of last resort for member banks, it is essential that they be prepared to control the volume of rediscounting or at least to limit it in times of business expansion. Limiting the rediscounting privileges of particular banks is obviously one possible way of accomplishing this. It is, of course, subject to the difficulties inherent in the exercise of discretion. These difficulties have been aptly described by Governor Benjamin Strong of the Federal Reserve Bank of New York,³ and include the following points:

1. Member banks rediscount after the occurrence of the transaction which results in an impairment of reserves. To refuse rediscount facilities at such a time would be a serious source of irritation.
2. With some members located at a considerable distance from the reserve bank, discretion is not easy.
3. The reserve bank in practice would be confronted with the necessity of determining whether or not the particular reason for reserve impairment was such as to justify aid.
4. Attempts to regulate the extension of credit to particular banks could hardly be combined into a unified policy for control of the total volume of reserve bank credit.
5. If the reserve bank refuses to rediscount for a member bank, it has actually assumed the responsibility for the refusal of loans to the bank's customers.
6. The use of discretion as a means of credit control might result in a "bureaucratic attitude" in the reserve banks toward the affairs of member banks.

² *Ibid*

³ Burgess, W. Randolph, ed, *Interpretations of Federal Reserve Policy* 1930, pp. 190-191

In spite of these difficulties, which make the dependence on discretion a poor method of controlling the volume of rediscounting, such a method must necessarily be relied upon at times. In cases where the uniform rediscount rate for a given district exercises no restraint upon those members in outlying territory who charge high rates to customers, discretion must necessarily be exercised to prevent an undue use of reserve bank credit by particular member banks. Also, the sentiment against continuous borrowing or rediscounting is closely related to discretion.

Under the Federal Reserve Act, as amended in 1933, it is the right and duty of the reserve banks, in granting accommodations to particular member banks, to consider the possible undue use of bank credit for speculation or other purposes "inconsistent with the maintenance of sound credit conditions." Further, the Board may suspend from all rediscount and borrowing privileges any member that persists in making undue use of bank credit. Thus there is now sufficient authority in the hands of the Board and the reserve banks to permit them to exercise direct pressure of the discretionary type if they care to do so.

The rediscount rate as an instrument of credit control. In contrast to the method of using discretion, the reserve banks may and do attempt to influence the volume of member bank rediscounts by means of the rediscount rate. The effect of these rates upon the volume of rediscounting by member banks has often been disputed. The dispute centers about the question of what rate, if any, can penalize a member bank sufficiently to reduce its willingness to rediscount. The arguments of those who hold that little can be expected in the way of restricting rediscounting by increasing the rate may be summarized as follows

1. In many cases the divergence in customers' rates between country and city areas in any district makes it impossible to make the rediscount rate high enough to penalize the country banks without being prohibitive to

the city banks, whose customers' rates are much lower. At the same time it is impracticable to attempt to charge country banks a higher rate than the city banks, not only because of the irritation which would arise but also because it would have the effect only of driving country banks to their city correspondents for accommodation. Similar considerations prevent wide differences in the rediscount rate of different districts.

Table XXII shows the discrepancy between the rediscount rate and the rate charged by members on paper offered for rediscount during 1923.

TABLE XXII

AVERAGE CUSTOMERS' RATE ON REDISCOUNTED PAPER
AND AVERAGE REDISCOUNT RATE BY DISTRICTS, 1923 *

<i>District</i>	<i>Federal Reserve Bank Rate</i>	<i>Member Bank Rate</i>
Boston	4 42%	5 07%
New York	4 42	5 22
Philadelphia	4 50	5 31
Cleveland	4 50	5 58
Richmond	4 50	6 09
Atlanta	4 50	6 25
Chicago	4 50	5 62
St. Louis	4 50	5 59
Minneapolis	4 50	7 93
Kansas City	4 50	7 15
Dallas	4 50	8 41
San Francisco	4 44	5 84

* *Annual Report of the Federal Reserve Board, 1923, p. 7.*

Perhaps one answer to this difficulty lies in the probability that restrictions on banks in money centers will have a more vital effect on general business conditions than restrictions applied to banks in rural areas. Another is simply that in such cases the reserve banks must exercise discretion.*

2. Some critics believe that the multiple expansion possibilities of bank credit on the basis of new borrowed reserves make it impossible to shut off expansion by a high

* Burgess, ed., *op cit.*, p 190.

discount rate. Obviously, if a bank which borrows \$1 in new reserves can lend some multiple of \$1 (let us say \$10, for example), it would be impossible, practically, to raise the cost of rediscounting high enough to make rediscounting unprofitable. This objection needs further analysis. Multiple expansion of new reserve cash into new loans and deposits can undoubtedly take place in the banking system as a whole. Moreover, it could be easily accomplished by a single bank with a monopoly. Our previous analysis leads us to the conclusion that in a banking system such as ours, with its multitude of unit banks, it is likely that any given increase in the loans of one bank based upon newly acquired reserves would lead to a loss of cash approximately equal to the loans so made. Also, the larger the banking unit involved in the making of the new loans, the greater would be the probability that checks drawn by the new borrowers would fall into the hands of other depositors of the same bank. Such banks would be less likely to lose cash as the result of lending and thus be more able to enjoy some degree of multiple expansion on the basis of new reserves. The existence of far-flung branch banking systems would be particularly conducive, therefore, to multiple expansion within themselves. Such banks would be less sensitive to an increase in the rediscount rate than would smaller unit banks. Even the unit banks might be subject to only a slight loss of cash while expanding loans if other banks were expanding loans in step or at about the same rate and at the same time. There is no statistical evidence as to whether or not commercial banks actually do expand in step during prosperity. To the extent that they do, however, a high discount rate would be of little influence, since each bank would in effect be able to make a direct multiple expansion of loans and deposits on the basis of new borrowed reserves.

3 It may also be argued that, without any direct opportunity for multiple expansion by an individual bank, it still follows that a higher discount rate will not reduce

loans to customers on funds obtained by rediscounting, because in practice rediscounting costs will be absorbed by the bank and not passed on to the customer in the form of higher rates. It is argued that the cost of additional reserves obtained through rediscounting at the higher rates is only a small part of the total cost of making bank loans. Such costs include wages and salaries of employees, rent, interest paid on deposits, and the like. An increase, let us say, of 25 per cent in the cost of rediscounting (by a rise in the rate from 4 to 5 per cent) would so little affect the total costs of making loans as to be of no importance. An opposite view of the effect of an increase in the rediscount rate is that new loans will not be made unless the necessary cost of getting funds for the new loan—that is, rediscount costs—is met by the customers' rate. Thus an application of the marginal cost theory of economics would tend to make the customers' rate rise as fast as the rediscount rate and remain above it. Governor Strong took a compromise view when he held that a rediscount rate will restrict rediscounting if it is somewhat above the average cost of the bank's loanable funds although below the average rate of return on its average loans and investments.⁵ Attention should also be called to the fact that, even though banks are able to rediscount and re-lend at a profit, their position is thereby made less liquid. An expansion of rediscounts by a member bank reduces its ability to obtain accommodation later by the using up of its quota of borrowing privileges at the reserve bank.⁶

It is probable that banks fail to take a strict marginal cost view in deciding rates to be charged on new loans. Moreover, the wish to prevent desirable customers from seeking loans elsewhere may easily persuade the banker

⁵ Burgess, ed., *op cit.*, pp. 195-196. For a discussion of penalty rates see HARRIS, S. E., *Twenty Years of Federal Reserve Policy*, Vol. I, Chapter 2.

⁶ Hawtrey suggests a similar reluctance of banks to dispose of their liquid bills in order to expand advances to customers. *The Art of Central Banking*, p. 153, *et seq.*

of the advantage of lending at rates which are unprofitable in view of current rediscount rates. An example of this is cited by Governor Strong in the case of a bank which borrowed \$15,000,000 at the reserve bank at 7 per cent while lending \$18,000,000 to a customer at 6 per cent.⁷ A substantial increase in the cost of borrowing or rediscounting may therefore be required if a member is to make appreciable changes in its customers' rates, quite irrespective of any tendency toward multiple expansion.

4. It may be argued that an increase in the rediscount rate may fail to restrict rediscounting because the inelasticity in the demand for short-time loans in times of prosperity enables commercial banks to make corresponding increases in customers' rates without discouraging customer borrowing. This argument would apply to manufacturers for whom interest on bank loans is a relatively unimportant part of costs. In times of large speculative profits it would likewise apply to stock market speculators. It may be argued, however, that traders carrying large stocks of goods on borrowed money are sensitive to changes in the bank rate, and a reduction of (or increase in) borrowing and purchase of goods on their part would exert a powerful influence upon the activity of the economic system. Although higher money rates would probably be ineffective in restricting the borrowing of both middlemen-traders and security speculators, once a boom of sizable proportion is under way, it is probable that changes in money rates might be effective under more normal conditions.⁸

There are those who are not entirely convinced that the rediscount rate may be made definitely restrictive through its effect on the cost of borrowing or rediscounting. They believe, nevertheless, that a change in the rate will influ-

⁷ Burgess, ed., *op cit.*, p. 91.

⁸ Some transactions are certain to be marginal in profit prospects and an increase in the cost of borrowed funds may prevent their being undertaken. Further, the member bank may reject altogether loans which would have been made with easier money rates.

ence member bank rates because it indicates the opinion in reserve bank circles regarding credit conditions.⁹

Open market operations as an instrument of control. The open market operations of the reserve banks, as authorized by Section 14 of the Federal Reserve Act, fall into two classes. The first class consists of purchases of bankers' acceptances, outright or under resale agreements, and short-term government securities under fifteen-day repurchase agreements. These have been called "involuntary" open market purchases because the initiative is taken by the seller rather than by the reserve bank. The reserve banks in such cases stand ready to purchase all offerings at a stated rate of discount which is determined in the light of current market rates for such paper and is designed to assist in the maintenance of a market. City banks resort to the sale of bankers' acceptances to the reserve banks as a means of increasing their reserves without rediscounting.¹⁰ Because of this fact, the buying rate of the reserve banks must be fixed not alone in view of the current rate on acceptances but also in view of general credit conditions. Too low a discount rate on bankers' acceptances may largely nullify the effects of a high rediscount rate.

The second class of open market operations is of the "voluntary" type, in which the reserve banks take the initiative. The voluntary open market operations are confined to the purchase and sale of government securities. It is by engaging in the purchase and sale of these securities that the reserve banks may take the initiative in bringing about changes in the volume of reserve bank credit. The sale of bonds by the reserve banks reduces by that amount the reserve balances of member banks. The immediate effect of this action is to drive member banks to replenish their reserves by the sale of bankers' bills or acceptances

⁹ Burgess, W. Randolph, *The Reserve Banks and the Money Market* (1936 revised edition), pp. 221, 230. Burgess definitely states that the most powerful effect of the change in the rediscount rate is the psychological one.

¹⁰ *Ibid.*, pp. 172-174.

to the reserve banks or by rediscounting. Since rediscounting and borrowing are in the end the main reliance of member banks, it follows that the sale of bonds by the reserve banks will cause an increase in the rediscounts of members. This in turn causes a tightening of the money market. First, it exposes member banks to a greater extent than before to the pressure of the rediscount rate. Second, and more important in the minds of many writers, borrowing as a continuous policy is considered undesirable, and banks react to forced rediscounting by raising customers' rates and generally restricting their loans and investments in an attempt to get out of debt. The reserve banks can, therefore, ease the money market by raising member bank reserves through the purchase of bonds in the open market. This increase in reserves permits members to reduce their borrowings and rediscounts. The reserve banks may expand their bondholdings to a point where member banks are out of debt and have a substantial excess of reserves. On the other hand they may tighten the money market by selling bonds and increasing the necessity for borrowing and rediscounting.

Sentiment against continuous borrowing by banks. Federal reserve authorities place much emphasis upon the sentiment against continuous borrowing by member banks. One reason for this emphasis lies in the fact that it harmonizes with the policy that one bank should not be permitted to utilize more than its share of the rediscount facilities of its reserve bank. Another reason for the importance of the enforcement and maintenance of this sentiment arises from the fact that the genuine liquidity of the reserve banks themselves cannot be maintained unless members refrain from any continuous credit extension upon borrowed reserves. We have seen, in our discussion of eligibility requirements, that it is not so much the kind of paper offered as a basis for borrowings or rediscounts that determines the liquidity of the reserve banks as it is the fact that members borrow only for short-term and for

emergency needs. Finally, the sentiment against continuous borrowing may be a powerful support for the efforts of the reserve banks to control the volume of credit. It obviously makes more effective the open market operations of the reserve banks described above. In fact, in the face of a strong enough sentiment of this kind, one might cease entirely to worry about the effectiveness of the discount rate and concentrate efforts of control upon the open market operations. The discount rate would be unimportant if banks could be relied upon to borrow only for seasonal and emergency needs.

Burgess speaks of the tradition against continuous borrowing as a heritage from the old national banking system.¹¹ The Federal Reserve Board has stated

It is a generally recognized principle that reserve bank credit should not be used for profit and that continuous indebtedness at the reserve banks, except under unusual circumstances, is an abuse of reserve bank facilities. In cases where individual banks have been guilty of such abuse, the Federal reserve authorities have taken up the matter with the officers of the offending banks and have made clear to them that their reserve position should be adjusted by liquidating a part of their loan or investment account rather than through borrowing. Abuses of the privileges of the Federal reserve system, however, have not been general among member banks. The tradition against continuous borrowing is well established, and it is the policy of the Federal reserve banks to maintain it.¹²

In spite of these efforts to build up a tradition against continuous borrowing, one may question the results. Governor Strong mentions the attempts to educate the banks in the matter,¹³ yet he admits that, if borrowing at the reserve banks is profitable, members will not reduce their rediscounts when they come into possession of extra funds but will be tempted to make additional loans.¹⁴ In respect

¹¹ *Ibid*, p. 219

¹² *Annual Report of the Federal Reserve Board*, 1928, p. 8.

¹³ Burgess, ed., *op cit*, p. 90

¹⁴ *Ibid*, pp. 181-182.

to conditions in 1925, the Federal Reserve Board said: "Under circumstances such as prevailed in the autumn of 1925, when the growth in member bank credit was largely in loans on securities, and when the growth in reserve bank credit was larger than the seasonal demand for currency, it was evident that a part of the member banks' borrowings at the reserve banks was for the purpose of building up their reserve balances."¹⁵ Later the Board says: "In consequence of the coöperation between reserve banks and member banks in working out the problems of continuous borrowers there has been a gradual decline in the number of member banks continuously in debt at the reserve banks."¹⁶ The record of continuous borrowers during the 1923 to 1926 period is shown in Table XXIII, shown below. During 1924 about 15 per cent of the total member banks were borrowing more than their capital and surplus continuously for over one month. In 1926 only 5 per cent of the member banks were so borrowing.

TABLE XXIII

NUMBER OF MEMBER BANKS BORROWING IN EXCESS OF CAPITAL AND SURPLUS CONTINUOUSLY FOR A MONTH OR MORE*

<i>Year</i>	<i>March</i>	<i>June</i>	<i>September</i>	<i>December</i>
1923			543	357
1924	326	431	364	179
1925	140	218	202	133
1926	111	193	198	113

* *Annual Report of the Federal Reserve Board, 1926, p. 5*

It remains to be seen how the tradition against continuous borrowing will fare in the face of a pronounced commodity price boom. But between January, 1925, and January, 1929, rediscounts varied inversely with changes in open market operations and the gold supply. During the interval (1925-1929) the country lost \$353,000,000 in gold, the reserve banks disposed of \$235,000,000 in bonds, and money in circulation dropped \$15,000,000. In the face

¹⁵ *Annual Report of the Federal Reserve Board, 1925, p. 16.*

¹⁶ *Ibid., 1926, p. 5.*

of a net loss of about \$573,000,000 in unborrowed reserves, member banks obtained \$592,000,000 through rediscounting and \$144,000,000 through the increase in open market purchases of bills by the reserve banks. During this four-year period, while the country was experiencing prosperity and a tremendous stock market boom, the net growth in member bank reserves was slightly less than \$200,000,000, or about 8.8 per cent. This involved a substantial increase in rediscounts in the face of an increase in rediscount rates of between 1 and 1½ per cent.

Control by changing member bank reserve requirements. Still another weapon remains for the exercise of control over the volume of member bank credit by the reserve authorities. The Board of Governors may now change the legal reserve requirements of member banks. The amount may not be less than the statutory requirements nor more than twice that amount. This authority vastly expands the power of the Board over rediscounting when pressure is to be exerted upon member banks. Like voluntary open market operations, it enables the Board to force members to rediscount. This in turn subjects the member banks to the necessity of facing the restrictive effect of the cost of borrowing and the tradition against it. It has the advantage over open market operations that the Board can make the restrictions felt by all the member banks if necessary, whereas open market operations primarily affect banks in the financial centers.

Summary. It is impossible to evaluate the importance of the several kinds of pressure which the reserve authorities can bring to bear on member banks to check secondary expansion of bank credit. As we have seen in the previous discussion, the effectiveness of any one of the controls depends largely upon the circumstances under which it is applied. There is reason to doubt the effectiveness of the rediscount rate, particularly in the face of rapid business expansion and rising prices. The same doubt may be expressed in respect to the tradition against continuous borrowing. There is less reason to doubt the effectiveness of

the combination of these two controls when backed by the power of the reserve banks to deal voluntarily in the open market and the power of the Board of Governors to change member bank reserve requirements.

Effect of government fiscal policy on bank credit. A discussion of the controls over the money market would be incomplete without a consideration of the part which may be played by fiscal policies of the government. If the government finds it necessary to sell bonds to finance a deficit and the securities issued are bought by the banks, an expansion of deposit credit results. It is possible, however, to utilize the fiscal policies of the government to control the size of bank reserves. For example, the issue of paper money by the government directly increases the volume of legal tender money and correspondingly increases bank reserves. Conversely, the retirement of such paper money reduces bank reserves. If the government wishes to reduce bank reserves, it may easily accomplish this either by levying extra taxes or by selling securities and depositing the proceeds in the Federal reserve banks. A reversal of this process would increase bank reserves, as would the shift in government deposits from the reserve banks to member banks.

In order to counteract the tendency of gold imports to increase bank reserves, the United States Treasury announced in December, 1936, that it would purchase incoming gold out of funds obtained by the sale of Treasury bills. Before this practice was begun, gold imports were paid for by drafts on the reserve banks against deposits created by the deposit of gold certificates issued against the newly acquired gold. Such drafts, of course, came into the possession of member banks and were utilized by them to increase their reserve balances at the reserve banks.

The Standards of Central Bank Policy

Central banks hold within their hands the power to influence materially the volume of bank credit. Since they are generally supposed to be less affected by the urge to

make profits than other banks, some standard other than the profit-seeking motive must be used as a criterion for their credit policy.

Neither the writers on banking nor the proponents of central bank policy are in complete agreement as to the proper guide to follow. One attitude, which is that adopted by Federal reserve authorities, emerges naturally from long experience with the international gold standard. It represents that, within the limits set by the necessity of watching gold reserve ratios, the proper procedure of the central bank is one which will provide adequate credit to finance the legitimate needs of commerce and industry. To accomplish this, it is necessary only to make sound loans to finance production and trade. Thus the solvency of the banking system is assured not only because such loans are self-liquidating, but also because they have no tendency to result in inflation since new credit is created only to finance new production. On the other hand loans of a speculative nature, or loans to finance fixed capital expansion, should be avoided since they are not accompanied by a corresponding increase in goods during the life of the loan; in other words they are not self-liquidating. The theory that soundly made loans of a self-liquidating nature cannot become the basis for an undesirable inflation is now pretty thoroughly exploded. Yet in spite of this, the fact remains that such a rule is a wholesome one from the standpoint of banking solvency under the gold standard where quantitative control of credit is subject to little management in any particular country.¹⁷ According to this view the central bank policy should be one of encouragement of member bank credit expansion of a strictly self-liquidating sort and a discouragement of speculative and capital loans. The central bank should, therefore, rediscount only self-liquidating paper and should create cash

¹⁷ For an extreme defense of this position, see Willis, H. Parker, *The Theory and Practice of Central Banking*. During most of its history the Federal Reserve Board took this approach to its problems of credit policy.

funds for members only in amounts needed to finance trade and industry.

In opposition to writers who adopt the position that qualitative standards are the correct ones are those who hold that since stability of business and prices cannot in fact be achieved by adherence to a mere qualitative standard, attention should be centered upon the problem of so controlling the volume of bank credit in the form of demand deposits and notes that the proper volume of purchasing power is maintained. Except in a strictly short-run sense, this view is out of harmony with the requirements of the international gold standard, whose operation presupposes, among other things, a flexible volume of money. However, it seems to lend itself readily to application to the problem of central bank policy, since the volume of bank credit obviously needs to be watched. According to this view, the nature of loans, assuming that they are well secured, is unimportant. Consequently the central bank need not concern itself about eligibility requirements. Adherents to this theory look with indifference upon the expansion of stock market loans and bond investments so long as the resulting volume of demand deposits and currency is correct. Unfortunately, there is still much uncertainty as to the correct amount of credit and the possibility of obtaining it under our present banking system regardless of the central bank credit policy which is adopted.¹⁸

The reserve ratio. Before the World War, central bank policy seems largely to have been a reflection of the ebb and flow of the country's gold supply. The changes in the reserve ratio of the central banks were necessarily the most important considerations in determining credit policy. Any sustained loss of gold was the signal for restrictive measures, while an increase in the gold supply indicated

¹⁸ For a good exposition of this position see Chapter IV of Lauchlin Currie's monograph on *The Supply and Control of Money in the United States*, 1934

the propriety of some expansion. Such a policy was required if an international gold standard was to function effectively.

Although central banks must respond to a loss of gold reserves, they need not react similarly to an increase in gold. But even central banks are not entirely divorced from the profit motive. They frequently pay dividends to private stockholders, and they have expenses to meet. Without abandoning their role of lenders of last resort, they may and ordinarily do expand credit when their reserves expand. Within the limits set by the reserve requirements, central banks may expand and contract their credit in a way calculated to stabilize the short-term money market. They act as a buffer to shield other banks from the effects of seasonal and accidental variations in the demand for funds. In respect to such short-time variations in the volume of credit, central banks may take the initiative and buy and sell in the open market, or they may adopt a passive attitude of standing ready to rediscount, reserving positive steps for dealing with the more fundamental changes that occur.

Within the limits of a credit policy finally determined by the size of the gold reserves, central banks very properly may exercise pressure to restrain booms or ease the money market to encourage recovery from depression, particularly if the variations in business activity are localized. It becomes more difficult to do this when the fluctuations in business activity are world-wide.

Stabilization of business conditions. In countries where the gold standard has been abandoned, the immediate importance of gold reserves disappears, and central banks are in a position to embark upon a program of credit control based on other standards. The Federal reserve banks after the War were in a position, because of their excessive gold reserves, to abandon reliance upon their reserve ratio as a basis for credit policy. It was true that their refusal to permit credit expansion sufficient to utilize these excess re-

serves added to the difficulties experienced by the other gold standard countries in reacquiring gold expelled during the War. Nevertheless, the reserve banks were free to adopt a standard of business stability as a basis for credit policy. Since 1933, excessive gold imports have presented a serious problem. Because these imports are largely the result of a flight of capital from European countries to the more promising opportunities of America, it is undesirable, from the standpoint of American business stability, that these imports should be allowed to become the base for an expansion of bank credit.

Stabilization of prices. Closely allied with the attempts to stabilize business conditions is the proposal that central bank policy should be pointed toward stabilization of prices. Such a standard would obviously be ill-adapted to a single gold standard country. Only through international coöperation among central banks could any long-run attempt at price stabilization hope to be a success. However, a country using an independent paper currency might attempt such a goal. Not only is price stabilization difficult if not impossible for a single gold standard country, but it also raises other troublesome problems. Granting the possibility of controlling the volume of credit so as to influence prices, there still remains the perplexing question of what price index should be stabilized, if any; or whether prices should actually decline under some circumstances in the interest of more fundamental economic stability. These questions cannot be examined here

The Credit Policies of the Federal Reserve System

We have already examined the various instruments of credit policy which are available to the Federal Reserve System. There remains for consideration the standards of policy and the instruments of control which have actually been used

Policy from 1914 to 1921. During the early years of the Federal Reserve System, credit policy was mainly a

passive one. The reserve banks stood ready to assist members by rediscounting when necessary, but the need for rediscounting was largely overcome by the importation of gold from the warring countries. Between 1915 and 1918 the net excess of our gold imports was over \$1,000,000,000. Reserve banks frequently purchased bonds in the open market to increase their earning assets to a point where they might pay expenses and dividends.¹⁹

The entrance of the United States into the War brought a tremendous demand for bank credit expansion to float government bond issues, and reserve bank credit policy was shaped for the accomplishment of that end. Rediscount rates were maintained at low levels during the War and early post-War period. From 1917 to 1918 the rate on customers' notes (secured by government bonds) varied from 3 to 4¼ per cent. The banks were encouraged to lend to customers who wished to buy government bonds beyond the capacity of their current incomes. As a result the government was able to float an enormous volume of bonds at low rates of interest. The reserve banks in turn rediscounted this war paper for members. On April 27, 1917, the total earning assets of the reserve banks were \$239,260,000. By November 29, 1918, they had grown to \$2,312,357,000. The great bulk of these assets consisted of "war paper."²⁰ The pressure to maintain low rediscount rates for the benefit of governmental fiscal needs continued until after January, 1920.²¹ These easy money conditions fed the flames of the post-War boom which collapsed so disastrously in the middle of 1920. At the peak of the boom, the reserve banks were compelled to give consideration to the adequacy of their reserves, which approached the legal minimum limits. During the ensuing period of liquidation they turned their efforts to stemming the crisis. It was not until 1922 that the reserve authorities were able

¹⁹ Reed, Harold L., *The Development of Federal Reserve Policy, 1922*, p. 250

²⁰ *Ibid.*, pp. 269, 274.

²¹ *Ibid.*, p. 301

to develop anything in the way of independent standards of credit policy.

Policy from 1922 to 1923. Between September of 1920 and November of 1924 the net excess of gold imports into the United States amounted to a little over one and one-half billions of dollars. This flood of gold had its effects on Federal reserve credit policy. The country was passing through the acute depression that followed the boom of 1920 and was emerging into recovery. It was unthinkable at such a time that the Federal Reserve System should adopt a policy based upon gold reserve ratios. To have encouraged bank credit expansion on the basis of new gold would have been to court another period of inflation.

The importation of gold enabled member banks to reduce their indebtedness to the reserve banks and made it more difficult for the reserve banks to keep in contact with the money market. It further embarrassed the reserve banks by expanding their gold reserves, which they were loath to use as a basis for credit expansion.

The reserve ratio for the combined Federal reserve banks rose from 42.7 per cent on October 15, 1920, to 79.2 per cent on July 26, 1922. This increase was due not only to the gold imports but also to the shrinkage of \$1,226,000,000 in Federal reserve notes.

In July, 1922, the practice was begun of paying out gold certificates into circulation instead of Federal reserve notes. The paper money of the country flows through the reserve banks about two and one-half times per year. This makes it possible for the reserve banks to substitute gold certificates for Federal reserve notes, and vice versa, in less than six months' time. The effect of this operation as undertaken by the reserve banks was purely psychological. It merely lowered the reserve ratios of the reserve banks and was supposed to have an anti-inflationary effect on the public mind.²²

²² Burgess, W. R., *The Reserve Banks and the Money Market* (first edition, 1927), pp. 257-258.

During the first half of 1922 the member banks' rediscounts fell to \$461,418,000, as compared with \$2,801,297,000 in October, 1920. To replenish their earning assets the reserve banks expanded their open market purchases of government securities to about \$600,000,000.²³ This year (1922) also saw the organization of the first committee for coordinating the open market operations and preventing any conflict between open market transactions and the fiscal policy of the government. This committee was made up of four governors (later five) of the Federal reserve banks.

Early in 1923 the Board established an open market committee (with the same membership as the previous one) to act as an agency for the execution of the open market transactions of the reserve banks. It also established the policy "that the time, manner, character, and volume of open market investments purchased by Federal reserve banks be governed with primary regard to the accommodation of commerce and business and the effect of such purchases or sales on the general credit situation."²⁴ In the autumn of 1923 the committee set up an open market investment account in which each reserve bank held a pro-rata interest. Since that time the open market operations have been carried on through this account.²⁵

Guides to credit policy in 1923. In its annual report for 1923, the Federal Reserve Board laid down certain principles for determining proper credit policy. These may be summarized as follows:²⁶

1. The serviceability of reserve ratios as guides to credit policy has been badly impaired by the abandonment of the

²³ *Annual Report of the Federal Reserve Board, 1923*, p. 13. The reason given for increased bond purchases may be questioned in view of the recognized tendency for rediscounts to decline as fast as bond purchases rise. See Reed, Harold L., *Federal Reserve Policy, 1921-1930*, pp. 23-32.

²⁴ *Annual Report of the Federal Reserve Board, 1923*, p. 16.

²⁵ Burgess, *op cit.*, pp. 218-219.

²⁶ *Annual Report of the Federal Reserve Board, 1923*, pp. 29-30.

gold standard during the War and the extraordinary gold movements which have developed. "Under the present conditions, with gold embargoes in force in most foreign countries, and the United States practically the only free gold market of the world, the movement of gold to this country does not reflect the relative position of the money market nor does the movement give rise to corrective influences, working through exchanges, money rates, and price levels, which tend to reverse the flow."

2. The use of a price level index as a guide to credit policy is rejected. Price changes arise from "a great variety of causes, most of which lie outside the range of influence of the credit system." Further, "no credit system could undertake to perform the function of regulating credit by reference to prices without failing in the endeavor." The price situation and the credit situation are not related to each other as simple cause and effect but are the outcome of common causes arising in the business situation. "The same conditions which predispose to a rise of prices also predispose to an increased demand for credit." An improved business outlook invites expansion by business. This expansion tends to raise prices and increase the demand for bank credit, but the reserve banks do not feel the effects until the forward movement in business has gained momentum. Timeliness of action is an essential feature of good credit administration, and the price index gives too belated a picture of business events.

3. Federal reserve credit should be utilized for accommodating productive activities but not for financing speculative or investment operations. Not only should reserve bank credit be used exclusively for productive purposes, but its volume should be so restricted as to be commensurate with increases in national productivity.

4. The tests for determining whether or not reserve bank credit is being put to proper productive use should be:

- (a) Are goods moving smoothly from producers through the channels of distribution to their

ultimate uses without interruptions by speculative interference?

- (b) Is the volume of trade, production, and employment in equilibrium with the volume of consumption?
- (c) "Credit provided for the purpose of financing the movement of goods through any one of the successive stages of production and distribution into consumption, is a productive use of credit." There is little danger of excessive use of reserve bank credit if confined to productive uses.
- (d) When credit is used to impede such movement of goods, it is not being productively used. Holding goods for speculative price increases is not productive.
- (e) The reserve banks, therefore, need to know to what extent, if any, member banks are rediscounting to extend credit for speculative use.
- (f) The Federal Reserve Board must be guided by general information as to the state of industry and trade, and by credit information which involves the accumulation of a large volume and wide variety of economic facts. A statistical analysis of these data forms the factual basis for credit judgment and the development of credit policy.
- (g) The information assembled is translated into index numbers, thus making possible "comparisons of the direction and the rate of change in the basic industrial and commercial activities in their relation to credit trends."

Credit policy from 1924 to 1927. In the face of sagging production and trade indices, the reserve banks during the year 1924 reduced their rediscount rates and increased their open market purchases of securities by \$436,000,000. At the same time gold imports increased the country's mone-

gold stock by \$256,000,000. The result was an easing of the money market and an expansion of loans and investments of member banks by \$2,288,000,000.²⁷ This, some writers, was evidence of an abandonment of the use of production indices as guides to credit policy.²⁸ On the other hand it may be argued that the use of production indices as guides to credit policy need not necessarily require the reserve banks to restrict credit during depression merely because business has declined. The Board says that good credit administration in times of active business expansion should not encourage or assist the excessive accumulation of forward commitments in business and banking which only later on will definitely reflect the rate which they have been taking place in resulting changes in credit volume and changes of price levels; and in times of business reaction should discourage enforced liquidation of past commitments."²⁹ In the same report it states: "If industry and trade are in process of recovery after a period of reaction they should be given support and encouragement of cheaper credit."³⁰ It is fair to maintain, therefore, that the easy money policy of 1924, which some critics have said reflected the desire of the reserve authorities to assist foreign countries to accumulate gold, can be considered as being in harmony with the policy enunciated in 1923. The same answer applies to those who criticize the easy money policy of 1927, when rediscount rate reductions were put into effect and open market purchases extended. Again, it is fair to say that the slackening in the pace of business might be met by easier credit conditions without abandoning the policy of 1923.³¹ There were certain conditions abroad which also suggested an easy money policy here. England was preparing

²⁷ Reed, *op. cit.*, pp 53-54

²⁸ *Ibid.*, p 60 Bradford, Frederick A., *Banking*, 1933, p 483

²⁹ *Annual Report of the Federal Reserve Board*, 1923, p 32.

³⁰ *Ibid.*, p 10

³¹ On this point see Hardy, Charles O., *Credit Policies of the Federal Reserve System*, 1932, pp 74-82

to resume the gold standard at the old par, although its internal price level remained high. Successful resumption would be facilitated by easy money here if. (1) it raised our price level somewhat, thus reducing the necessity for so much price deflation in England; or (2) it shifted some of the burden of international trade financing from the London money market to New York. Each of these results might have occurred. It was desirable that the accomplishment of currency and exchange stability be hastened, and the return to the gold standard by England and Germany would help in this respect. Further, low money rates here stimulated the sale of foreign securities in this country. This in turn probably gave some support to the demand for our exportable farm commodities (whose prices were weakening) by reducing the strain of gold losses from the monetary systems of countries buying our exports.³²

Credit policy from 1928 to 1929. The period from 1928 to 1929 presented difficulties in the way of credit policy. Commodity prices were fairly stable, and there was little evidence of commodity speculation. At the same time there developed a boom in stock prices. It was the opinion of reserve bank officials, particularly those of the New York Federal Reserve Bank, that control over the credit situation could be accomplished only by reducing reserve bank credit. The Federal Reserve Board held more to the opinion that credit control should be exercised by granting reserve bank credit to banks which were using credit only for productive purposes. The first opinion, therefore, leaned in the direction of control by the rediscount rate; the second opinion favored the use of discretion.³³

During the first half of 1928 rediscount rates were raised from $3\frac{1}{2}$ per cent to $4\frac{1}{2}$ per cent, and securities were sold in the open market. Yet business prosperity continued and stock speculation increased. Banks increased their rediscounts in the face of the higher rates, indicating that

³² Reed, *op. cit.*, pp. 64-74.

³³ Hardy, *op. cit.*, pp. 124-128.

the pressure exerted was inadequate to slow down the speculative trend.³⁴

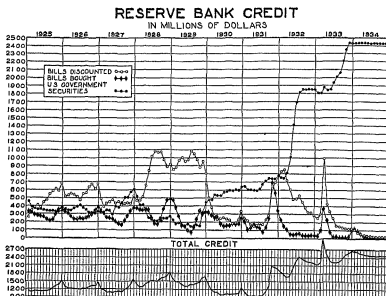
Early in 1929 the reserve banks wished again to advance the rediscount rates but were overruled by the Board, which was reluctant to increase the cost of credit to ordinary business and preferred to attempt to apply direct pressure upon member banks. Member banks which made excessive stock market loans were refused rediscount privileges. This attempt was at least partially successful in keeping down brokers' loans by banks but was nullified by a great increase in loans by "others" (lenders other than bankers). This policy was abandoned about the middle of 1929 and the rediscount rates raised to 6 per cent, but the buying rate on bankers' acceptances was lowered to $5\frac{1}{8}$ per cent, with the result that members resorted to the sale of acceptances instead of rediscounting.³⁵ By this time the stock market was so out of hand that rediscount rates had little effect. When the market collapsed in October, 1929, the reserve banks came to the rescue by expanding open market holdings of bonds and by rediscounting freely. Between October 23 and October 30, banks outside of New York City and "others" withdrew about \$2,000,000,000 in brokers' loans from the stock market. But the readiness of the reserve banks to lend aid prevented the development of a money panic.³⁶ The reserve authorities were unable to choose between a desire to check stock market speculation and the fear of inducing a depression in business by an excessive increase in the cost of credit. Direct pressure was effective in preventing the direct use of reserve bank credit in the stock market, but loans by "others" nullified the effect of this restriction. The present law which prevents banks from making loans for nonbanking firms on the security exchanges will go far to strengthen the use of direct pressure.

³⁴ *Ibid.*, pp. 128-132.

³⁵ *Ibid.*, pp. 131-139.

³⁶ Reed, *op. cit.*, p. 187.

Policy from 1930 to 1933. The policy of the Federal Reserve System has definitely been one of easy money since the stock market collapse of 1929. The rediscount rate of the Federal Reserve Bank of New York was reduced from 6 per cent, where it stood in October, 1929, to $4\frac{1}{2}$ per cent



in the following November. By June, 1930, it had fallen to $2\frac{1}{2}$ per cent and a year later stood at $1\frac{1}{2}$ per cent. In the meantime United States securities held by the reserve banks were increased from \$154,000,000 in October, 1929, to \$610,000,000 by June, 1931. As a result of gold imports and the expansion of reserve bank holdings of securities, member banks' rediscounts were reduced from \$952,000,000 to \$188,000,000 and excess reserves rose to \$128,000,000.

The European banking disturbances culminating in the abandonment of the gold standard by England in September 1931, resulted in heavy pressure on the American banks. From June 30 to October 30, 1931, our stock of monetary gold declined from \$4,956,000,000 to \$4,292,000,000, or

\$664,000,000. In October alone the loss of gold was over \$300,000,000. This resulted in a sharp increase in rediscounting by member banks from \$149,000,000 to \$728,000,000. In addition, member banks sold \$571,000,000 of bankers' acceptances to the reserve banks. At the same time the reserve banks increased slightly their holdings of United States securities while increasing rediscount rates. The Federal Reserve Bank of New York increased its rate from $1\frac{1}{2}$ per cent to $3\frac{1}{2}$ per cent.

The heavy withdrawal of gold cast some doubt on the ability of the reserve banks to continue their purchase of United States bonds for the purpose of building up member bank reserves, because, unlike rediscounted paper and collateral notes which the reserve banks receive from member banks that take the initiative in obtaining reserve bank aid, these bonds could not be used as collateral for Federal reserve notes. Therefore gold had to be used instead, with the result that serious limits were set upon the ability of the reserve banks to give up gold. This difficulty was remedied by an amendment to the Federal Reserve Act in February, 1932, permitting the use of United States securities as collateral. In the first half of 1932, therefore, the reserve banks increased their holdings of United States securities by about \$1,100,000,000, which enabled member banks to meet an outflow of gold of \$500,000,000 and at the same time reduce rediscounts by more than \$300,000,000 and increase somewhat their reserve balances. The rediscount rate of the Federal Reserve Bank of New York was reduced to $2\frac{1}{2}$ per cent, where it remained until the banking holiday in March, 1933.

From the middle of 1932 up to February of 1933 there was little change in reserve bank credit except for the fact that member banks reduced their rediscounts by \$300,000,000. The United States securities held by the reserve banks showed little change. The domestic situation was further eased by a temporary slowing up in the rate of bank failures and by the importation of \$600,000,000 in

gold. But this lull in the banking troubles was not destined to last. Public distrust of the stability of the banking system increased rapidly, especially during February, 1933, with one state after another declaring banking holidays in a vain attempt to give bankers time to obtain funds to meet their obligations. To quote the Federal Reserve Board.

Between early February and March 4, money in circulation increased \$1,830,000,000 of which \$1,430,000,000 was in Federal reserve notes and \$320,000,000 in gold and gold certificates, and at the same time \$300,000,000 of gold was withdrawn through earmarking. Nearly two thirds of these demands were concentrated in the week ending March 4. In order to obtain currency and gold, member banks, between early February and March 4, increased their bills discounted at the Federal reserve banks by over \$1,170,000,000 and drew down their reserve balances by over \$500,000,000. At the same time the reserve banks increased their holdings of purchased bills by \$390,000,000 and of United States Government securities by nearly \$100,000,000.⁸⁷

This pressure reduced the reserve ratio of the reserve banks to 45.3 per cent on March 3, causing the Federal Reserve Board to suspend the reserve requirements for a 30 day period. At the same time money rates rose sharply and the rediscount rate of the Federal Reserve Bank of New York was raised to 3½ per cent.

The general banking holiday was gradually terminated beginning March 12. So completely was confidence restored that pressure upon the banks was relieved. Money withdrawn for hoarding was returned to the banks for deposit. Member banks were able to liquidate about \$1,000,000,000 of their indebtedness to the reserve banks. The reserve banks again reduced their rediscount rates and expanded their open market purchases of United States securities by over \$500,000,000, bringing their total holdings up to \$2,400,000,000, at which figure they remained until 1937. The year 1933 ended with rediscounts down

⁸⁷ *Annual Report of the Federal Reserve Board, 1933, p. 8*

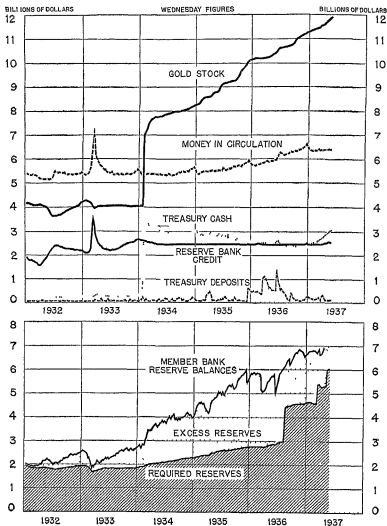
to \$111,000,000 and member bank excess reserves at \$765,-700,000.

Policy from 1933 to 1937. The most important development affecting the credit situation in 1934 was the reduction of the gold content of the dollar from 25.8 grains of nine tenths fine gold, where it had stood since 1837, to 15 $\frac{1}{2}$ grains. This was accomplished by Presidential proclamation January 31, 1934, after the passage of the Gold Reserve Act of 1934. The stabilization of the value of the dollar at the new low point was immediately followed by a rapid increase in the importation of gold. During the remainder of 1934 net gold imports were \$1,136,000,000. In 1935 they were \$1,739,000,000, and in 1936 they were \$1,-116,000,000.

At the beginning of 1934, excess reserves of member banks were \$765,000,000. This was considered ample to accomplish the goal of easy money desired by the Board of Governors. But the flow of gold imports continued, swelling deposits of the member banks and increasing their excess reserves. During the latter part of 1935 and part of 1936 the reserves of member banks were about \$3,000,000,-000 in excess of legal requirements.⁸⁸ Both in business and in the banking community some uneasiness arose at the prospects of extreme inflation which might follow business recovery if such a vast volume of excess reserves was allowed to remain. Under the circumstances, the reserve banks themselves were powerless to control the situation (1) because the disposal of all of their government securities would have fallen far short of absorbing the excess reserves and (2) because it was questionable whether or not such a large volume of securities could be dumped on the bond market without creating difficulties for the Treasury. On August 15, 1936, therefore, the Board of Governors put

⁸⁸ The excess varied somewhat with changes in deposits of the Treasury in the Federal reserve banks. An expansion in such holdings caused a decline in member bank reserves. Also, the changes in money in circulation influenced the size of member bank reserves.

MEMBER BANK RESERVES AND RELATED ITEMS



Courtesy of Board of Governors of Federal Reserve System.

Chart Showing Changes in Excess Reserves up to May 1, 1937

into effect a 50 per cent increase in the legal reserve requirements. This reduced the excess reserves of member banks from \$3,260,000,000 to \$1,790,000,000.

Between August 15, 1936, and the end of February, 1937, new gold imports of \$760,000,000 brought the excess reserves above the \$2,000,000,000 mark. The Board of Governors therefore raised the legal reserve requirements 33½ per cent to bring the required reserve ratio to the maximum figure permitted by the law.³⁹ This reduced the excess reserves to about \$900,000,000. The anticipated increase in reserve requirements on May 1, when the total increase in requirements became effective, was accompanied by a reduction in government bond holdings of member banks and a weakening in government bond prices. To offset this somewhat the Federal reserve banks increased their holdings of government securities by about \$100,000,000.

Since the latter part of December, 1936, gold imports have not been allowed to affect member bank reserves. This has been accomplished by the purchase of gold by the Treasury with funds obtained by the sale of Treasury bills instead of the more usual method of purchase by drafts on the Federal reserve banks drawn against funds created by the deposit of gold certificates. However, the present problem of control is further complicated by the fact that the Treasury holds over \$3,400,000,000 in free gold consisting of the profit from devaluing the dollar and gold purchased since December, 1936, under the sterilization plan just described. Were it to deposit this gold with the reserve banks and spend it (or use it to retire part of the government debt), member bank reserves would be correspondingly increased over their present figure. Unless a substantial part of the gold which has been imported within the last few years is withdrawn again, it will obviously tax the present powers of the Federal Reserve System to keep contact with the money market if and when the Treasury decides to utilize this free gold for fiscal purposes.⁴⁰

³⁹ One half of the increase went into effect March 1 and the remainder on May 1.

⁴⁰ \$300,000,000 of this gold was released by the Treasury in September, 1937, with a consequent increase in the excess reserves of members.

TABLE XXIV

FEDERAL RESERVE BANK CREDIT, GOLD MOVEMENTS, EXCESS RESERVES, AND DISCOUNT RATES
(In Millions of Dollars)

<i>Date</i>	<i>Rediscounts</i>	<i>Bills Purchased</i>	<i>U. S. Securities</i>	<i>Gold Imports</i>	<i>Excess Reserves</i>	<i>Redis Rate N Y Cdy</i>
Oct 1929	884	337	154		42	6
Nov 1929	952	296	315		65	4½
Dec 1929	803	320	446	175	48	4½
June 1930	251	141	571		53	2½
Dec 1930	338	257	644	280	72	2
June 1931	187	120	609		128	1½
Dec 1931	774	340	776	145	59	3½
June 1932	495	50	1,697		234	2½
Dec 1932	282	34	1,854	-446	525	2½
June 1933	250	12	1,933		363	2½
Dec 1933	117	101	2,432	-173	765	2
June 1934	28	5	2,424		1,685	1½
Dec. 1934	10	6	2,430	1,133	1,748	1½
June 1935	8	5	2,431		2,438	1½
Dec. 1935	6	5	2,430	1,881	2,983	1½
June 1936	4	3	2,430		2,717	1½
Dec. 1936	3	3	2,430	1,132	1,984	1½

CHAPTER XX

FOREIGN BANKING SYSTEMS

The American banking system and banking practices differ in a great many respects from foreign systems and foreign banking practices. Foreign methods of chartering differ materially from the American as do also the degrees of concentration in control, the relations of banks to industrial enterprise, and the nature of the operations of central banks. The discussion of foreign banks in this chapter is intended to reveal the characteristics and practices of foreign banking in such a way that these distinctions and differences may be clearly visualized.

The Canadian Banking System

The chartered banks. Ten chartered banks make up the commercial banking system of Canada. Because the Canadian banking law permits the establishment of branches (both at home and abroad) and because a large minimum capital requirement of \$500,000 has been adopted, Canada has built up a banking system consisting of a few large banks rather than a host of smaller ones. Twenty-eight banks were originally reincorporated under the Bank Act of 1871. The number rose to a maximum of 41 in 1886 and has declined, through failures and mergers, to the present ten.¹ The charters issued under the Bank Act have a life of only ten years, giving occasion for a

¹ Willis, H. Parker, and Beckhart, B. H., eds, *Foreign Banking Systems*, 1930, pp. 298, 326. The student who is interested in a comprehensive study of foreign banking systems may well consult this authoritative work.

regular revision of the law at the end of every decade. This plan has the obvious advantage of bringing the banking law before the public for scrutiny at regular intervals, a practice which is in clear contrast with the sporadic efforts at amending the banking laws of the United States.

The size and the availability of numerous branches of the Canadian banks enable businessmen to obtain adequate accommodation from a single bank instead of compelling them to borrow from several banks, as often happens in the United States. Banks therefore become intimately acquainted with the borrower's affairs and can more safely extend him needed assistance than might otherwise be possible. Moreover, the law (Sections 88 and 89) permits banks to obtain a first lien on that part of the borrower's goods which is listed as security when the loans are made. This privilege exists in the case of loans to dealers in the products of the extractive industries (agriculture, forestry, mining, and the like), loans to farmers on threshed grain, and loans to manufacturers. To protect the other creditors of businessmen who borrow from banks, loans made under Sections 88 and 89 must be registered in the office of the Assistant Receiver General of the province of the borrower. The liens of banks are superior to those of unpaid vendors whose claims were unknown to the bank when the loans were made. Claims to goods in process are not affected by a change in form, and when goods originally subject to the lien are sold, any substitute goods bought by the borrower come under the lien. If the borrower defaults on a bank loan or embarks upon a policy which displeases the banker, the latter may take possession of the goods. The arrangement is mutually advantageous to bank and borrower. The bank receives the same degree of protection as that afforded by warehouse receipts, the borrower, because of the superior security offered, can obtain more assistance from his bank than would be possible if he were not able to give the bank a preferential lien. At the same time he is allowed a flexibility in the use of his

goods and in the disposal of them which would be impossible to obtain through the use of warehouse receipts.

Banks are prohibited from making loans on any bank stock or upon real estate security. The prohibition of loans upon real estate has undoubtedly exercised a wholesome influence upon the assets of the chartered banks, but at the same time it has prevented farmers from having access to banks for financing purchases of land and for making improvements. In another respect, however, the Canadian system has been of distinct benefit to agricultural regions. The branch banks collect deposits in the more populous areas, where funds are plentiful, and lend them in the prairie provinces, where capital is naturally scarce. The Canadian farmers in the prairie provinces obtain loans at rates substantially below those paid by the farmers of the Dakotas² On the other hand, the branch banking systems have been accused of tyrannical practices in their lending policies and of sending out young managers into rural districts to gain experience at the expense of the communities they are supposed to serve.

Note issue. Before 1935 paper money in the Dominion was limited to two types: Dominion notes and notes of chartered banks. The banks were originally granted the right to issue notes to the amount of their paid-in capital, but this limitation became irksome as the currency needs of the country expanded. The bank note issues were largely utilized to meet the ordinary currency needs, leaving little expansion power for the seasonal needs of the agricultural districts. To meet this difficulty, permission was granted in 1908 for the issue of additional bank notes during the autumn and early winter months to an amount equal to 15 per cent of a bank's capital and surplus. Notes so issued were taxed at 5 per cent per year while outstanding.

The notes of each of the ten chartered banks are secured

² Willis and Beckhart, *op cit*, pp 452-453.

by a prior lien against the general assets of each issuing bank. As a further means of protecting holders of notes in case of bank failure, banks are required to deposit 5 per cent of their average yearly note circulation with the Minister of Finance for the Bank Circulation Redemption Fund out of which notes of failed banks are to be redeemed in case the notes are not paid by the liquidating agent within two months. If the Fund is unable to collect enough from the assets of the failed bank to equal what it pays out for note redemption, additional contributions must be made by the remaining banks. In addition to the notes secured by the general assets, the chartered banks were allowed (before 1935) to increase their note issue further by the deposit of gold or Dominion notes with four trustees who administered the "central gold reserves." No contribution to the redemption fund was required against notes so issued, since the notes were virtually gold certificates and were important only in enabling banks to convert their gold reserves into convenient currency form.

Since the establishment of the new central bank, the Bank of Canada, on March 11, 1935, the right of note issue by the chartered banks has been restricted. The right to expand the note issue between the first of September and the end of February is abolished, as is also the former right to issue notes against gold deposited in the central gold reserves. Note issues of any chartered banks may not now exceed the paid-up capital which each bank had at the time when the Bank of Canada began business. In addition, the volume of outstanding notes is to be reduced 5 per cent annually for five years beginning January 1, 1936, and 10 per cent annually for five years beginning January 1, 1941. After January 1, 1946, therefore, the chartered banks may have a volume of notes not to exceed 25 per cent of their paid-in capital.^a

Canada's need for a central bank. Until March 11, 1935, Canada had no central bank, and in this pre-cen-

^a *The Canadian Year Book*, 1934-35, pp. 962-963.

tral bank era the chartered banks maintained their liquidity by placing short-term or call loans in New York, which could be relied upon as a source of quick funds in time of need. Currency demands were met by an expansion of note issue, while complete freedom from any legal reserve requirements gave the banks an opportunity to make actual use of available cash reserves as needed. This whole procedure was in marked contrast with the situation in the United States before the establishment of the Federal Reserve System. Nevertheless, there arose a need for some source of added reserves, especially after the outbreak of the War in 1914. The answer to this need was the Finance Act of 1914, which permitted the chartered banks and the Quebec savings banks, in time of emergency, to obtain legal tender Dominion notes by depositing approved securities with the Minister of Finance. The borrowing banks were required to pay at least 5 per cent interest on these advances.

Nine years later came the Finance Act of 1923, which permitted the Minister of Finance to make advances to the banks at rates of interest prescribed by the Treasury Board for periods up to one year, regardless of whether or not an emergency existed. These advances were to be secured by the deposit either of approved securities or certain specified types of short-time notes and bills of exchange. Thus there developed a variety of central bank functions in the hands of the Department of Finance. The administration of the powers granted to the Department of Finance by this law has been sharply criticized. Although it possessed some of the functions of a central bank, the Department had no discernible credit policy, and it failed to raise the rate of discount on its advances of Dominion notes when such an increase would have been desirable. The resulting credit expansion set up an unfavorable international debt balance.

When called upon to redeem Dominion notes in gold for export, the Treasury found itself with a gold supply insufficient to maintain free convertibility, and for some

time during 1928 and 1929, the gold standard was practically suspended in Canada, owing to the refusal of the Treasury to redeem Dominion notes in gold.⁴ The Canadian Bankers' Association said in respect to the situation "There exists no properly constituted body which can admit responsibility for the general supervision of credit or exchange in Canada"⁵ In 1933 a Royal Commission, appointed to study the Canadian banking and currency situation, recommended the establishment of a central bank.

The Bank of Canada. The act authorizing the creation of the Bank of Canada went into effect July 3, 1934, but was amended June 23, 1936. The Bank's authorized capital is \$10,100,000, divided into 100,000 Class *A* shares sold to the public and 102,000 Class *B* shares sold to the Dominion Government. Although the Class *A* stockholders actually elected seven directors under the original provisions of the law, by the amendment of 1936 the Class *A* stockholders will, after 1940, be represented by only three directors. The Dominion Government, as the Class *B* stockholder, appoints six directors, who have double voting power until 1940, when the number of Class *A* directors is reduced to three. Thus the Bank of Canada has definitely been placed under complete government control. Before the 1936 amendment, the Bank was owned and the directors elected by the private stockholders; now the tables are turned. The Governor of the Bank, who is the chief executive officer, the Deputy Governor, and the Assistant Deputy Governor are appointed by the Governor in Council.

The Bank may buy and sell coin, gold, and silver bullion, bankers' and trade acceptances, bills of exchange with maturities of not over ninety days, securities of the Dominion or any province with maturities of not over two

⁴ Curtis, C. A., "Credit Control in Canada," *Papers and Proceedings of the Canadian Political Science Association*, 1931, Vol II, pp 101-122.

⁵ Quoted in the *Report of the Royal Commission on Banking and Currency in Canada*, 1933, p 66 This Report contains a useful survey of the Canadian banking and monetary system as well as recommendations for improvements.

years, and short-term securities of the United Kingdom and the United States. In addition, it may deal in bills of exchange and promissory notes indorsed by the chartered banks and may make loans to the chartered banks and Quebec savings banks on the pledge of eligible paper and securities. It may also make short-time advances to the Dominion Government and to any provincial government. The Bank acts as fiscal agent for the Canadian Government.

The Bank took over the issue of all Dominion notes except those issued under the Finance Act, which were retired on the establishment of the Bank. The Bank may also issue notes as needed by the country or by the chartered banks. A reserve in gold coin or bullion must be maintained which is equal to at least 25 per cent of the Bank's notes and deposit obligations. The chartered banks were required to surrender their gold to the Bank of Canada and, under penalty of 10 per cent on the amount of any deficiency, must carry reserves equal to at least 5 per cent of their deposits in the form of notes of the Bank of Canada or deposits with it.

The stockholders of the Bank of Canada are entitled to $4\frac{1}{2}$ per cent annual cumulative dividends; the remainder of the bank's earnings are to be divided between the surplus ("rest") fund and the government, until the surplus equals the capital, when all earnings go to the government.

Regulation of banks. Before 1924, Canadian banks were free from external regulation. The failure of the Home Bank in 1923 brought a demand for some sort of supervision, and the first result of this demand was an amendment to the Bank Act in 1924 which provided for an inspector general of banks, empowered to examine the chartered banks. Examination of the head offices of the banks, it is thought, will be particularly effective in view of the fact that bank failures in Canada have generally resulted from discoverable fraud and dishonesty of officers in

the head office rather than from speculations of the branch managers.⁶ A certain amount of self-regulation had been imposed in 1913 by a law which required an audit of the books by a representative of the stockholders. Moreover, the Canadian Bankers' Association, incorporated in 1900, is empowered to promote the interests and efficiency of banks and bank officers and the education and training of those contemplating employment in banks. It can establish and regulate clearing houses and is given supervision over the issue and destruction of bank notes. It is also authorized to establish by-laws, with the consent of the Treasury Board, which have the effect of law. Under the Bank Act as amended in 1934, the double liability attached to bank stock is limited to the proportion of par value which the authorized note issue bears to the paid-up stock.

Other financial institutions. The chartered banks have not been allowed to make real estate loans, nor have they attempted to enter the field of administration of trusts. To a limited extent they can be said to have entered the investment banking field in that they execute orders to buy and sell securities for their customers and underwrite government and municipal bonds and high-grade corporate issues.⁷ Other institutions exist, therefore, to perform the ordinary financial functions which either are not performed at all or are insufficiently performed by the chartered banks.

The Canadian investment bankers borrow from the chartered banks and trust companies to obtain funds to carry their portfolios of securities. In addition, they sometimes act as selling agents for issuing concerns where the risk of outright purchase has been too great.⁸

Real estate loans are made by two types of agencies.

⁶ Willis and Beckhart, *op cit*, p. 478.

⁷ *Report of the Royal Commission on Banking and Currency in Canada*, p. 33

⁸ *Ibid*, p. 45.

TABLE XXV
NUMBER OF BRANCHES OF INDIVIDUAL CANADIAN CHARTERED BANKS
AS OF DECEMBER 31, 1934 *

<i>Bank</i>	<i>Prince Edward Island</i>	<i>Nova Scotia</i>	<i>New Brun- swick</i>	<i>Quebec</i>	<i>On- tario</i>	<i>Man- itoba</i>	<i>Sas- katch- ewan</i>	<i>Al- berta</i>	<i>British Colum- bia</i>	<i>Yukon</i>	<i>Out- side Canada</i>	<i>Total</i>
Bank of Montreal ..	1	13	13	113	199	36	38	49	51	2	11	526
Bank of Nova Scotia .	8	36	36	21	128	7	20	9	6		39	310
Bank of Toronto ..				14	96	12	25	13	10			170
Banque Provinciale du Canada	3		13	106	14							136
Canadian Bank of Com- merce	6	18	6	60	261	40	78	55	62	2	13	601
Royal Bank of Canada	6	62	22	78	234	67	100	54	49		82	754
Dominion Bank			1	8	99	12	4	4	3		2	133
Banque Canadienne Na- tionale				205	13	8	6	5			1	238
Imperial Bank of Canada				3	116	8	35	23	11			195
Barclays Bank (Canada)				1	1							2
Totals	24	129	91	609	1,161	190	306	211	192	4	148	3,065

* *The Canadian Year Book*, 1934-1935, p. 978. The number of branches declined 16 per cent from December 1930 to December 1935.
The Economist (London), Banking Supplement, October 17, 1936, p. 14

The first consists of mortgage loan companies, chartered under Dominion and provincial laws, which obtain funds by the receipt of deposits and the issue of debentures. In the second group are the government rural credit agencies. Ontario and Saskatchewan have province-owned, long-term rural credit institutions, while the Canadian Farm Board, organized in 1929, makes long-term loans in Alberta, New Brunswick, Nova Scotia, and Quebec. In addition, Ontario, Alberta, and Manitoba have provincial agencies designed to extend short-time agricultural credits.⁹ Trust companies engage in the performance of the ordinary trust company functions and, in addition, accept deposits and make long-term loans.

The chartered banks accept both savings and current accounts. The Dominion Government operates a postal savings system called the Post Office Savings Bank. Ontario and Manitoba operate provincial savings systems; Quebec has two large privately owned savings banks operating under provincial charters, as well as numerous co-operative people's banks.¹⁰

The English Banking System

The English banking system has four important divisions: (1) the joint stock banks, (2) the Bank of England, (3) the accepting houses, and (4) the discount market.

The joint stock banks. The bulk of the banking business directly affecting the general public is in the hands of the joint stock banks, since the volume of business of the private banks is relatively small and since the direct business of the Bank of England with the public is of a very limited sort. This joint stock monopoly did not always exist. Originally private banks were an important part of the English banking system, but they have declined to the point where there are now only four banks, with

⁹ *Ibid*, pp 45-46

¹⁰ *Ibid*, pp 24-26

total assets of only £15,121,195¹¹ Amalgamations have reduced the number of joint stock banks in England and Wales from 104 banks with 2,203 branches in 1890 to 15 banks with 10,118 branches at the end of 1935.¹² This high degree of concentration has tended not only to increase the efficiency and economy of banking service available to the public but also to bring about a greater uniformity of banking practices. One resulting uniform practice is the maintenance of a fairly fixed reserve ratio which adds considerably to the effectiveness of the credit policies of the Bank of England.¹³ In Scotland, banking is also in the hands of joint stock banks. In 1935 there were 8 joint stock banks operating 1,868 branches, with total assets of £379,035,738.

Since 1879 the joint stock banks have been permitted to operate as "limited companies"—that is, companies whose stockholders are subject to limited liability. The ratio of their invested capital to deposit liabilities is considerably less than that in the banks of the United States; thus the stockholders' equity of the "big five" banks, as represented by capital and reserves, in June, 1936, was only 5.7 per cent of their deposit liabilities and for all joint stock banks, 6.2 per cent, as compared with a ratio of stockholders' equity to deposits averaging 14 per cent for our national banks.

Except for the prohibition on the issue of notes and the requirement of an annual report or statement of condition to the Registrar of Joint Stock Companies, the joint stock banks are free from legal regulation or supervision. This freedom is in marked contrast to the American practice of close supervision and regulation by public authority

The deposits of the joint stock banks. The deposits of the joint stock banks comprise two classes (1) current accounts, corresponding to our checking accounts; and (2) deposit accounts, corresponding to our time deposits. Since the War there has been a marked increase in the relative importance of deposit accounts, a development that has paralleled the post-War growth in importance of time deposits in the United States.

TABLE XXVI
DEPOSITS OF THE TEN CLEARING BANKS OF LONDON *

Year	Total Deposits	Current Accounts (In Millions of £s)	Deposit Accounts	Ratio of Current Accounts to Total	Ratio of Deposit Accounts to Total
1919	£1,510.7	£1,015.9	£494.8	67.2%	32.8%
1920	1,719.7	1,097.6	622.1	63.8	36.2
1921	1,753.6	1,024.7	728.9	58.4	41.6
1922	1,707.4	998.3	709.1	58.5	41.5
1923	1,614.1	965.6	648.5	59.8	40.2
1924	1,615.7	950.0	665.7	58.8	41.2
1925	1,602.7	922.5	680.2	57.6	42.4
1926	1,608.9	921.4	687.5	57.3	42.7
1927	1,658.6	932.1	726.5	56.2	43.8
1928	1,708.9	953.7	755.2	55.8	44.2
1929	1,788.0	940.1	797.9	54.1	45.9
1930	1,740.8	920.8	820.0	52.9	47.1

* Report of the Committee on Finance and Industry 1931 (The Macmillan Report), p. 37.

The reserves of the joint stock banks. The cash reserves of the joint stock banks consist of cash in the hands of the banks themselves and deposits with the Bank of England. In 1919 the ten London clearing banks carried a reserve of 14.3 per cent of their total deposits. This cash ratio dropped to 10.8 per cent in 1930 and to 10.4 per cent in October of 1936.¹⁴ Table XXVII shows the distribution of the reserves of the clearing banks for the years 1919 to 1930.

Loans and investments of joint stock banks. The portfolios of the joint stock banks are so arranged as to give

¹⁴ *The Economist*, Banking Supplement, October 17, 1936, p. 5

TABLE XXVII

PERCENTAGE RATIO OF CASH AND DEPOSITS IN THE BANK OF ENGLAND
TO TOTAL DEPOSITS FOR THE TEN LONDON CLEARING BANKS*

Year	<i>Deposits in the</i>		<i>Total</i>
	<i>Cash</i>	<i>Bank of England</i>	
1919	7.4%	6.9%	14.3%
1920	6.2	4.9	11.1
1921	6.3	5.5	11.8
1922	6.3	5.4	11.7
1923	6.4	5.4	11.8
1924	6.4	5.5	11.9
1925	6.5	5.4	11.9
1926	6.4	5.4	11.8
1927	6.3	5.1	11.4
1928	6.1	4.9	11.0
1929	6.0	4.8	10.8
1930	5.9	4.9	10.8

* Average monthly figures, *Report of the Committee on Finance and Industry*, p. 35.

a proper degree of liquidity. The most liquid of bank assets is money at call and lent at short notice (up to ten days). Such loans are made to the bill market, which we shall examine later, and to some extent to the stock exchange. Next in order of liquidity are bills of exchange and treasury bills which have been discounted. These derive their liquidity from the fact that they are of short maturities and may be allowed to "run off" at maturity (not replaced by new bills) in case the banks wish to increase their reserves. The investments of the banks are mainly long-term and short-term government issues. Finally, the banks advance funds to customers either in the form of overdrafts on current accounts or on ordinary loans. Table XXVIII shows the relative importance of the different elements of the joint stock banks' portfolio.

It is evident that since the War advances to customers have, with some variation, amounted to about 50 per cent of deposits. In 1936 such advances were only 39 per cent of deposits, as compared with 55.5 per cent in 1929, while investments were 28 per cent of deposits, as compared with 15.8 per cent in 1929. The English banks experienced, as did the banks of the United States, a heavy decline in loans

and a heavy rise in investments in government securities during the depression.

TABLE XXVIII

PERCENTAGE RATIO OF DIFFERENT TYPES OF ASSETS TO TOTAL DEPOSITS OF THE LONDON CLEARING BANKS*

Year	<i>Money at</i>		<i>Bills</i>	<i>Investments</i>	<i>Advances</i>
	<i>Money at Call</i>	<i>Short Notice</i>	<i>Discounted</i>		
1919	15%	7 2%	17 6%	23 3%	38 4%
1920	14	44	15 1	21 4	48 4
1921	16	42	20 4	19 9	45 1
1922	17	48	18 8	24 6	41 7
1923	15	52	16 5	23 4	45 2
1924	15	49	14 3	22 6	47 9
1925	15	57	13 6	19 1	51 3
1926	16	59	13 0	17 7	53 3
1927	15	69	12 7	16 4	54 2
1928	17	73	13 2	16 1	54 0
1929	17	69	12 7	15 8	55 5
1930	19	62	14 7	16 2	53 6

* *Report of the Committee on Finance and Industry*, p. 37

TABLE XXIX

CONDITION OF THE JOINT STOCK BANKS OF ENGLAND AND WALES,
JUNE 30, 1936*

	<i>The Big Five</i>	<i>Others</i>
Capital and reserves	£ 112,286,211	£ 21,477,892
Acceptances and endorsements	86,487,008	15,232,756
Deposit and current accounts	1,941,910,100	301,163,455
Cash in hand and at the Bank	251,454,408	48,593,291
At call and short notice	147,758,888	28,293,792
Investments	549,039,770	121,594,938
Discounts and advances	1,060,535,465	116,052,129

* Compiled from data appearing in *The Economist*, Banking Supplement, October 17, 1936.

The accepting banks. The financing of foreign trade is a vital matter in such a country as England. It is not surprising, therefore, that special institutions to assist in this financing developed at an early date. One of the most important methods of caring for the credit needs of foreign traders is through the use of the letter of credit and the banker's acceptance. In England the issuance of letters of credit and the acceptance of drafts drawn thereunder have

been concentrated mainly in the hands of accepting houses which specialize in the hazardous business of evaluating the credit standing of the applicants for letters of credit. Not only do they "accept" for domestic importers, but, in order to finance exports and the shipment of goods between foreign countries, they furnish the same service for foreign clients and foreign correspondent banks. These accepting houses receive a commission for their service, varying from 1 to 2 per cent per year, depending upon the risk involved and the client's credit. The joint stock banks also engage to a limited extent in the accepting business.¹⁵

Although the accepting banks do not engage in commercial banking, they carry on, in addition to their acceptance business, a rather extensive variety of financial operations which have been well described by Hartley Withers in the following quotation:¹⁶

Other functions of the merchant firms and the accepting houses are their activity in general finance and in exchange business. Both of these functions arise out of their old business as merchants, which gave them close connection both with the governments and the business communities of foreign countries. Their connection with the governments naturally led to their providing credit facilities for them, and to their handling loans and other operations which these governments might have to conduct in the London market. Many of them act as regular agents of foreign governments, making issues of bonds on their behalf, paying their coupons, and conducting amortization and other business in connection with their loans, and their connection with the general business community inevitably led to their doing a considerable exchange business with foreign countries, financing drafts on them for the purposes of travel and the innumerable other arrangements which necessitate the transfer of credit from one country to another. It should perhaps be added

¹⁵ *Report of the Committee on Finance and Industry*, pp. 40-42. For an interesting discussion of the manner in which certain merchants of high credit standing took over the function of accepting drafts and hence were called "merchant bankers," see Withers, *The Meaning of Money*, 1916, pp. 160-161.

¹⁶ *The English Banking System*, N. M. C. 1910, p. 57.

that the Bank of England's court of directors is largely recruited from the ranks of the accepting firms and finance houses

The discount market. The offerings of accepted bills of exchange are taken off the market by a class of specialists who are known by the general term of "bill brokers." These specialists possess a great volume of information concerning the credit of merchants and the standing of different classes of bills of exchange, data which they use to derive an income for themselves. These specialists fall into three general classes: (1) the running brokers, (2) the retail dealers, and (3) the discount houses.¹⁷ The running brokers, who are relatively unimportant, act merely as intermediaries between the sellers of bills on the one hand, and banks and other investors on the other. They work for a commission and invest no capital of their own. The retail dealer operates in substantially the same manner as do bill brokers in the American bill market. They purchase bills and resell them at a profit, but in the meantime they must borrow funds with which to carry their portfolio of bills. The discount houses, while engaging in some retail business, are primarily engaged in buying bills and holding them until maturity. The funds to carry these bills are, for the most part, obtained by borrowing on call or short notice from banks or other lenders, and from general deposits on which interest is paid at a rate somewhat above that offered by the banks. The discount houses operate on a very narrow margin of owned capital; their large volume of borrowed capital places them in an extremely vulnerable position in respect to the money market. Whenever the banks, as a whole, find it necessary to improve their cash reserves, they do so by reducing their loans to the discount houses and other money market dealers. These in turn must obtain cash immediately, and they can do so only by discounting acceptable bills with the

¹⁷ Withers, Hartley, *The Meaning of Money*, Chapter VIII. Also see the *Report of the Committee on Finance and Industry*, pp. 43-45

Bank of England or by borrowing from it on the security of bills or government securities. Thus it is through the discounting of bills for the bill brokers that the Bank of England acts as a lender of last resort for the English money market.

The Bank of England. Founded in 1694 for the purpose of making loans to the hard-pressed government, the Bank of England is closely bound up with traditions which have the force of law itself. It is privately owned and, except for the law governing its advances to the government and its note issue, and the requirement that a weekly statement be published, it is free to carry on banking functions in any way it may desire.

Circulating notes of the Bank of England make up all of the currency of England and Wales, with the exception of minor token coins.¹⁸ The volume of notes which the Bank may issue is determined by a peculiar rule whose origin dates back to the Bank Act of 1844. As a means of avoiding excessive note issues, this famous Bank Act required that note issue be separated from the banking department of the Bank of England and that notes should be issued only against 100 per cent gold coverage held by the issue department. An exception was made to this rule which allowed the Bank to issue £14,000,000 in notes against a corresponding volume of government securities. Further, as country banks with note-issue privileges for any reason became disqualified as note-issuing banks, the Bank of England was permitted to absorb two thirds of their former note-issue privileges. By 1921 all of the country banks had lost their right of note issue, and in 1923 the fiduciary (uncovered) issue of the Bank of England stood at £19,750,000. Under the Currency and Bank Notes Act of 1928, the Bank of England absorbed the currency (treas-

¹⁸ The eight Scottish joint stock banks and certain banks in Northern Ireland have the right to issue notes backed 100 per cent by Bank of England notes and in addition a small volume of fiduciary or uncovered notes. *Report of the Committee on Finance and Industry*, p. 28.

ury notes) issued by the government during the War, and to accomplish this the Bank was allowed to expand its fiduciary issue to a maximum of £260,000,000. Some emergency elasticity of note issue is now provided through the power of the Treasury to authorize a temporary increase of the fiduciary issue. The banking department of the Bank obtains notes for its use by the deposit of gold with the issue department or, if the fiduciary limit has not been reached, by the deposit of securities.

TABLE XXX

STATEMENT OF THE CONDITION OF THE BANK OF ENGLAND
AS OF OCTOBER 7, 1936

<i>Issue Department</i>			
Notes issued		Government debt	£ 11,015,100
In circulation	£450,842,095	Other government securities	248,387,815
In banking department	57,818,251	Other securities	332,062
		Silver coin	265,023
		Amount of fiduciary issue	260,000,000
		Gold coin and bullion	248,660,346
	<u>£508,660,346</u>		<u>£508,660,346</u>
<i>Banking Department</i>			
Proprietors' capital	£ 14,553,000	Government securities	£ 79,753,337
Rest	3,083,750	Other securities	
Public deposits	24,751,671	Discounts and advances	9,290,887
Other deposits		Securities	19,569,046
Bankers' accounts	84,192,276		28,859,933
Other accounts	40,941,591	Notes	57,818,251
	<u>125,133,867</u>	Gold and silver coins	1,090,767
	<u>£167,522,288</u>		<u>£167,522,288</u>

As can be seen from Table XXX, the deposits of the banking department are nominally divided into three classes. "Public deposits" are the funds belonging to the various branches of the British Government. Of the "other deposits," the "bankers' deposits" are the balances of the British banks, while "other accounts" include balances of

Dominion and foreign banks, deposits of the Indian and colonial governments, and the deposits of financial houses and private customers. The assets of the banking department (right-hand side of the balance sheet) consist of (1) government securities, including treasury bills acquired on the initiative of the Bank; (2) discounts and advances, which include bills brought to the Bank for discount and advances to the bill market and to the Bank's own customers; (3) bank notes issued by the issue department but not in circulation; and (4) gold and silver coin.¹⁹

Although for many years the Bank of England refused to admit its responsibility as a lender of last resort in time of stress, it is now firmly committed to that practice.²⁰ This means that it is accessible to eligible borrowers at their option, and that it has a moral responsibility to make advances at all times of financial emergency. In this respect its duty is similar to that of the American Federal reserve banks. However, there is one important difference between the English and the American central banking arrangements. Whereas member banks go directly to the reserve banks for accommodation, the English joint stock banks do not, instead, they reduce their loans to the bill market, and the bill brokers and discount houses in turn go to the Bank of England. Each Thursday the Bank normally fixes a rate, known as the "bank rate," at which it will buy acceptable bills offered to it. Discount houses may either sell their bills outright to the bank or may borrow at the Bank, at a rate $\frac{1}{2}$ of 1 per cent above the bank rate, for periods of about one week. To be eligible for purchase,

¹⁹ *Report of the Committee on Finance and Industry*, pp. 29-30.

²⁰ Like any central bank, the Bank of England can render this aid only if it is well fortified with reserves. Although its directors were reluctant to admit that the Bank of England was substantially different from other banks, there was a tacit admission of its responsibilities in the fact that its reserves were normally higher than those of other banks and that it did come to the rescue of the money market by heavy rediscounts of bills and advances in times of trouble. On this point see Bagehot, *Walter, Lombard Street*, pp. 43-44, 64, 164-172.

bills should "bear at least two good British names, one of which must be the acceptor" ²¹

The bank rate is effective in the British money market partially because of the custom of the "clearing banks" ²² of varying their own interest rates so as to keep them in a certain relation to the bank rate. This relation, in general, is that (1) the clearing banks allow interest on time deposits at a rate 2 per cent below the bank rate; (2) the rate charged on advances to customers is from $\frac{1}{2}$ to 1 per cent above the bank rate; and (3) the rate charged on call money is somewhat above that paid on deposits. ²³ Of course, it is entirely possible that in times of excessive reserves competition for loans will force the market rate of interest below that justified by the customary relation to the bank rate. This situation is one with which we are familiar, for it occurs in relation to the Federal reserve banks when their discount rate becomes entirely ineffective because of the absence of need for rediscounting by member banks. However, the small number of banks in the English money market and long experience with the leadership of the Bank of England make the moral effect of the bank rate greater than that of the Federal reserve rediscount rate. When, however, the Bank of England wishes to make its rate effective, it does so by disposing of part of its assets. Thus, "cash" is absorbed from the money market just as open market sales by the reserve banks reduce members' cash reserves, and the bill market is forced to resort to the Bank where borrowers feel the effect of the bank rate on new advances and rediscounts. In the past, the Bank has resorted to borrowing on government bonds rather than outright sale when it desired to avoid losses

²¹ *Report of the Committee on Finance and Industry*, pp. 43-44.

²² Ten large London banks, with the Bank of England, are members of the London Clearing House, through which most of the check clearings for England and Wales are carried out. These ten banks are known as the "clearing banks."

²³ *Ibid.*, p. 32

that might result from a possible decline in the market value of securities. Now the policy is to allow short-term treasury bills, of which the Bank carries an ample supply, to mature without renewal.²⁴

The Exchange Equalization Fund It is evident that bank reserves are normally affected both by the movement of the Bank of England notes into and out of circulation and by gold imports and exports. Under existing arrangements, however, gold does not flow directly into the English banking system in settlement of international exchange transactions. The abandonment of the gold standard in 1931 left the British pound free from any particular gold value. The customary effects of gold imports and exports are now absent; instead, exchange rate control is vested in the Exchange Equalization Fund set up by the Treasury.

When the foreign rates of exchange fall in London to a point where it seems desirable to bring into operation the exchange control mechanism, the Exchange Equalization Fund steps in and buys foreign exchange, paying for it with sterling funds which it may obtain by the sale of treasury bills in the bill market. If the foreign bills bought are converted into gold and returned to England, all the effects of an ordinary gold import will appear, except that the incoming gold is not deposited with the Bank of England and does not affect the volume of reserves of the joint stock banks. Thus the British Equalization Fund operates to sterilize gold imports in the same manner as does the gold purchase policy begun by the United States Treasury in December, 1936. If the Treasury wishes to allow the imported gold to increase bank reserves, it may sell its gold to the Bank of England. The credits which it receives can then be used to retire treasury bills originally issued, and the reserves of the joint stock banks are thereby increased.

²⁴ Hawtrey, R. G., *The Art of Central Banking*, pp. 151-152.

The French Banking System

True to the individualistic traits of the French people, the banking system of France is conducted upon an individualistic basis, with few regulations imposed upon it. From this lack of regulation comes a lack of published data in respect to the banking business. Many banks publish no statements, and those that do have a habit of arranging items in such a way that it is impossible to draw a reliable picture of their affairs. Because of the absence of regulation, it is impossible to know even the exact number of banks actually in operation.²⁵ The banking system consists of five major parts: (1) the Bank of France, which operates both as a commercial bank and as the central bank; (2) the great credit banks, which carry on the bulk of the country's commercial banking; (3) the local and regional deposit banks, (4) the investment banks, and (5) the private banks.

The Bank of France. Like the Bank of England, the Bank of France seems to owe its origin to the desire of government interests for a ready source of credit. It was founded in 1800 by Napoleon Bonaparte because he was unable to get satisfactory credit from the existing banks.²⁶ The Bank performs the three-fold function of fiscal agent for the government, bank of rediscount, and commercial bank. In the last-named capacity it is the largest commercial bank in France and maintains over six hundred offices and agencies throughout the country. Its capital is privately owned, but its management is divided between the General Council, or executive body, consisting of the Governor and two Deputy Governors all appointed by the

²⁵ On this point see the Introduction to "The Banking System of France," by Robert J. Lemoiné, in Willis and Beckhart, *Foreign Banking Systems*.

²⁶ Liessc, André, *The Evolution of Credit and Banks in France*, N. M. C. 1909, Chapter I. This study gives a comprehensive view of the origins and development of the Bank of France, as well as a briefer survey of the activities of the credit banks.

government, and the board of fifteen Regents and three Auditors, elected by stockholders living in Paris.

Both for its regular business customers and for other banks, the Bank of France discounts trade or bankers' bills with maturities of not over three months. These bills may be of either domestic or foreign origin and must bear three good names if unsecured or two names if secured by the Bank's own stock or by government obligations. It makes loans and advances on the security of French and colonial securities and upon gold. In its position of fiscal agent, the Bank lends financial support to the government by making short-time advances to it and by purchasing and distributing its bond issues.²⁷

The Bank has a monopoly of bank note issue. Originally the law under which it operated required only that the note issue be so limited as to make it possible for the bank to redeem its notes in specie, but later a fixed maximum limit was provided. This limit had little effect upon the volume of note issue at times when limits were most needed, for the government promptly extended the limit whenever the legal maximum interfered with the ability of the Bank to make government loans. Since 1928 the law has required the Bank to carry gold reserves of not less than 35 per cent of its combined note and deposit liabilities without restriction on the total volume of notes.

The credit policy of the Bank of France is a moderate one. Its willingness to make advances to other banks (by rediscounting at regular rates not subject to frequent change) is in direct contrast with the more active part taken in credit control by the Bank of England. This stability of the French discount rate has been made possible in part by the stable economic structure of the country itself and in part by the freedom of the Bank of France from the sudden drains on its reserves arising from foreign demands, which are so important in the case of the Bank

²⁷ Willis and Beckhart, *op cit*, pp. 547-549

of England.²⁸ Whatever control on credit the Bank exercises comes through its discount rate, which is especially effective because of the direct contact which the Bank has with the business community. The influence of the Bank is further augmented by the customary use of bank notes as a medium of exchange in France, a custom maintained because of the imperfect development of any extensive check-clearing system. Any increase in business activity increases the demand for currency, which in turn leads to rediscounting. The volume of notes needed and the consequent volume of new rediscounting rise much faster under these circumstances than in the case of English business expansion, where the main requirement is an increase in the reserve cash to support bank deposits. Unlike the American Federal reserve banks and the Bank of England, the Bank of France has not resorted to the use of open market operations as a means for credit control, although it possesses limited power for such operations.²⁹

The great credit banks. The bulk of the commercial banking of France is carried on by six large joint stock banks which finance industry and trade in much the same manner as do the English joint stock banks.³⁰ These banks make short-time advances to business houses and discount their trade bills. They have branches and affiliated institutions throughout France, in the French colonies, and in foreign countries. Financing of French domestic trade, which is the main function of the credit banks, is done largely by the discounting of trade bills and acceptances, although unsecured overdraft advances are also made to customers in substantial amounts. Only a small part of the loans of the credit banks are made on securities or

²⁸ *Ibid.*, pp. 559-560

²⁹ Madden, John T., and Nadler, Marcus, *The International Money Market*, 1935, pp. 307-312.

³⁰ These six are: (1) *Crédit Lyonnais*, (2) *Comptoir National d'Escompte de Paris*, (3) *Société Générale*, (4) *Crédit Commercial de France*, (5) *Crédit Industriel d'Alsace et de Lorraine*, and (6) *Banque Nationale pour le Commerce et l'Industrie*. *Ibid.*

commodity collateral. Their cash reserves consist largely of notes of and deposits in the Bank of France.

Other banking institutions. Besides the six big credit banks, there are a large number of smaller banks, some regional, some local, which perform a miscellaneous variety of functions, including commercial banking. Some commercial banking is carried on by investment banks that accept deposits and make short-time loans in addition to underwriting securities. The furnishing of long-time capital to new and old companies is their major function, however, and they therefore maintain close contact with the affairs of their clients. The more important of the private banks, as, for instance, the House of Rothschild, place foreign loans, care for the interests of the big capitalists, and through their directorship position on the boards of large concerns wield a powerful force in economic affairs. Others engage in a miscellaneous type of business, distributing securities and engaging in general banking.⁸¹

The German Banking System

The banks of Germany are difficult to classify because of their highly varied activities. In general, however, they may be grouped into two classifications: public and private banks. The former are either government-owned or controlled or cooperative in nature; the latter are privately owned incorporated credit banks and private banks.⁸²

The Reichsbank. Although its origin can be traced back to 1785, the *Reichsbank* proper was established in 1875. Like the Bank of France, it is the central bank of its country, rediscounting notes and bills for other banks and making direct loans to them. Like the Bank of France,

⁸¹ Willis and Beckhart, *op cit.*, pp. 597-609.

⁸² Madden and Nadler, *op cit.*, p. 366. This book gives an especially valuable and well organized treatment of the modern conditions of German banks and financial institutions. Willis and Beckhart, *Foreign Banking Systems*, contains detailed accounts of the activity of both the public and private institutions.

also, the Reichsbank deals directly with nonbanking customers who carry deposits with it and obtain funds from it. In addition, it is responsible for the operation of a clearing system for effecting the transfer of funds between individuals and firms. Although the Reichsbank is privately owned, the management is strongly influenced by the government. Under a law of 1924 reorganizing the bank after the extreme inflation from 1922 to 1923, a 40 per cent reserve in gold and foreign exchange was required against notes issued, and not more than one fourth of this reserve was to be in the form of foreign exchange. As security for notes not covered by the required reserve, the bank was required to hold bills of exchange of not over three months' maturity. Later, penalties which the law provided for reserve deficiencies were removed, and the management of the bank may now allow the reserve to fall below the legal minimum. Further, the law now permits the use of securities as well as bills of exchange as collateral.²³

In addition to its right to buy and sell bullion and foreign exchange, the Reichsbank may discount bills of exchange which bear three good names and are not over three months' maturity (if additional collateral is furnished, a limited volume of two-name paper may be taken) and three months' treasury bills indorsed by a solvent third party. It may also make loans on the collateral of gold and silver, securities, bills of exchange, and merchandise. Other German banks both rediscount and borrow directly at the Reichsbank to increase their cash reserves. The Reichsbank may make short-time loans to the central government and purchase in the open market Reich, German state, and municipal bonds and bonds of public credit and mortgage banks. The open market powers are exercised only to a limited extent, however, for the Reichsbank relies

²³ Madden and Nadler, *op cit*, pp 373-376

mainly upon its discount rate and credit rationing for its instruments of credit control.³⁴

Both the banks and the general public carry "giro" or clearing accounts with the Reichsbank. The importance of these giro accounts may be visualized when one considers that payments in Germany are not made by checks on bank deposits, as in the United States and England. Instead, either currency is used or the payment is made through the giro accounts. Simply stated, the giro system transfers funds from the account of the debtor to the account of the creditor upon an order of the debtor given directly to the bank. In the use of checks, the order is given to the creditor or payee, who himself presents it for payment or credit. The Reichsbank is able to undertake this function by reason of the five hundred branches which it maintains throughout Germany. Further, it is closely tied in with the Reichspost or giro system operated by the post-office department, which makes payments of smaller sums between smaller firms and individuals.³⁵ To facilitate further the clearing of obligations between financial institutions and banks arising from dealings in bills, securities, and the like, the Reichsbank has set up clearing houses in the larger business centers, where all money claims may be exchanged and the balance settled by credits on the clearing members' accounts with the Reichsbank. Besides these clearing houses set up by the Reichsbank, other local clearing houses exist which handle interbank clearings.

Other public banks. The Gold Discount Bank, a subsidiary of the Reichsbank, assists in the financing of German foreign trade by discounting bills drawn on foreign buyers of German goods. A government holding company owns a bank which engages in ordinary commercial bank-

³⁴ *Ibid.*, pp. 371-372, 380

³⁵ For a detailed account of the operation of the "giro" system of payments used in Germany, see *Miscellaneous Articles on German Banking*, N. M. C. 1910, pp. 171-243

ing, and several of the German states own banks whose main function is to act as bankers for their owners. In addition, there are numerous public mortgage banks and communal financing institutions

Private credit institutions. The credit banks of Germany are both incorporated and private. Their operations are not purely commercial in character; rather, they associate themselves with the industrial interests in an unusually intimate way. In this respect they differ from the banks of the United States, England, and France. They do both commercial and investment banking and tend to specialize in the financing of certain industries in which they often hold stock. These incorporated banks have tended to become fewer and larger through mergers and the extension of branches.

A large part of the business of financing industry is concentrated in the hands of the *Grossbanken*, which consist of five large Berlin banks and three large provincial banks. Like the banks of England and France, the credit banks are free from public regulation in the sense that we know it in the United States. There is no law requiring the publication of statements of condition, although the Berlin Bourse (stock exchange) requires the publication of statements as the price of admission of new shares to trading privileges.

Summary

Relation of banks to industry. The British banks grew up as instruments for financing trade and commerce rather than industry, this history has influenced their credit practices down to the present time. Reflecting this practice and the habit of financing both domestic and foreign trade by the use of bills of exchange, the credit extended by English banks is to a large extent in the form of discounted bills. Advances to industry are usually also for short periods. One may say, therefore, that the English commercial banks have almost exclusively confined themselves to furnishing

short-time capital to British trade and industry. Relatively little long-time capital is advanced through stock market loans or bank purchase of industrial securities, and none through the making of real estate loans. The commercial banking assets of English banks are primarily self-liquidating in nature, and only to a small extent do they depend upon "shiftability" for liquidity. The same is true of the big credit banks of France, although some of the smaller banks engage in long-time financing. This practice is in contrast with that of commercial banks in the United States, which have departed widely from mere extension of short-time commercial credits. Although they do not extend credit on real estate security, the Canadian banks extend loans to industry for periods somewhat longer than the maturity of bills of exchange bought by British banks. Nevertheless, their loans are mainly for working capital rather than for fixed capital purposes. In Germany, however, as in other Central European countries, the big banking institutions have extended both short-time and long-time credits. In contrast with the aloof attitude of British and French commercial banks is the policy followed by the German banks of affiliating themselves closely with industry even to the extent of owning stock and participating in the management.

Degree of supervision. The banks of the United States are the most closely supervised in the world. Next in line come the Canadian banks, which must submit to examination by outside authority. The banks of England, France, and Germany are, in contrast, virtually free from regulation and control.

Relation of the central bank to the money market. Both the Bank of France and the German Reichsbank rediscount for other banks and thus expand the cash resources of the commercial banking system. This practice resembles the methods employed by the Bank of Canada and American Federal reserve banks in putting funds into the money market. In contrast is the practice of the Bank of

England of purchasing bills of exchange from the bill market rather than from commercial banks. The Bank of England, the Bank of France, and the Reichsbank all deal directly with the business community, injecting and extracting funds with an expansion and contraction of loans. On the other hand, the American reserve banks and the Bank of Canada confine their lending to other banks.⁹⁹ Only the Bank of England and the American Federal reserve banks make any serious attempts to control the money market by open market operations of the central banks.

⁹⁹ Although Federal reserve banks have limited power to make direct loans to industry, they have not made any significant use of it

CHAPTER XXI

FOREIGN EXCHANGE

Problem of Financing Foreign Trade

✓ Financing goods in transit. Regardless of whether or not the seller of goods extends credit, he normally must arrange to finance the shipment while it is in transit. Only when the foreign buyer pays cash in advance can the seller escape this burden, and such cases are rare. Financing the shipment involves only the burden of waiting for payment until the goods arrive and remittance is received in return. If the seller is in a strong enough financial position to wait during this interval, the foreign exchange banker's function is not one of financing but merely that of a collection agency. If the exporter is not willing or able to wait the time necessary to collect the funds, he can call upon his bank for aid. This aid may take the form of a loan secured by the draft drawn on the buyer and the documents of title to goods shipped, or it may involve the purchase (or discount) of the draft itself. In either event, the bank advances the funds before the collections are actually realized from the export.

✓ Financing exports on credit. If the exporter agrees to sell on credit, in order to give the foreign buyer time to resell the goods before payment, his problem becomes more difficult. The time which he must wait for payment is prolonged. Again he may resort to his bank for aid, either by borrowing or by discounting time drafts drawn on the

foreign buyer. Exporting on credit is further complicated by the necessity for knowing the credit standing of the foreign buyer.

The seller's protection. Whether the seller finances the export himself or relies upon the bank, he bears the risk, since he is legally liable as drawer of any drafts on the buyer which he discounts with his bank. Because of the difficulties involved in investigating the credit standing of foreign buyers, export credits are probably less generally extended upon open account than is the case in domestic trade. Exporters often keep control over their goods until they are paid (cash sales), or until drafts drawn on foreign buyers are accepted (credit sales). An exporter ships goods under an order bill of lading, which is a document of title, and the buyer cannot obtain his goods until he gets possession of the bill of lading. The exporter draws a draft or bill of exchange on the buyer, ordering him to pay on sight or on a certain date. To this bill of exchange he attaches the bill of lading and forwards both through his bank to a foreign bank, which in turn presents the bill of exchange to the importer for payment or acceptance. Or, the exporter may sell the bill of exchange to his bank, which then handles the transaction for itself. Instead of drawing directly on the buyer, an exporter may demand the right to draw a bill of exchange against a well-known bank which has previously authorized the drawing by the issuing of a letter of credit and has agreed to accept the bill and pay it upon maturity.

Foreign Bills of Exchange

Nature and origin of foreign bills of exchange. A foreign bill of exchange is simply a draft drawn by someone in one country on someone in a foreign country payable in the foreign country's currency. It may be payable at sight or after the expiration of a certain time. It may be drawn on an individual, a business firm, or a bank by an individual, a business firm, or a bank. Sellers of goods

who by their sales contract have agreed to receive payment in the currency of the buyer's country draw foreign bills of exchange either against the buyer or against the buyer's bank under a letter of credit. Bankers in the United States draw drafts or bills of exchange against their deposits in foreign banks and sell these drafts to Americans having remittances to make abroad.

Commercial bills of exchange.¹ Drafts drawn by exporters (or by others to whom foreign funds are due) are known as *commercial bills of exchange*, because they arise directly out of commercial transactions. Commercial bills may be classified according to (1) the time they are to run, (2) the security; and (3) if secured, the terms under which the documents are to be released to the buyer.

Commercial bills may be payable at sight or on time. If a bill is drawn in order to collect for services, there are no documents to attach, and the bill is therefore a clean bill. If it is drawn for the sale of goods and the documents are attached, it is known as a *documentary bill*. If the credit of the importer is good, the bill may be marked "documentary acceptance," meaning that he can get his documents entitling him to possession of the goods when he accepts the draft. Otherwise the documents will be released only upon payment of the draft. Commercial bills drawn on banks under letters of credit are normally marked "documentary acceptance," and entitle the drawee banks to possession of the documents on acceptance of the bills.

Bankers' bills. Bills of exchange drawn by American banks on foreign banks are known as *bankers' bills*.² These bills are of several different types. Those payable on

¹ Bills drawn by individuals upon other individuals are sometimes called "trade bills," with the term "commercial bills" reserved for those drawn by individuals on banks under letters of credit. Edwards, Geo W, *International Trade Finance*, 1924, p. 46.

² The term "bankers' bills" is sometimes used to include all bills drawn on bankers, whether by other banks or by individuals under letters of credit (which we have included under "commercial bills"). This usage applies particularly to the discount market.

demand are either *sight drafts* or *cable transfers*. Those payable on time are divided into *short bills* and *long bills*.

Bankers' bills may be drawn against balances in foreign banks and sold to persons having obligations to pay abroad. They may also be drawn against foreign banks for the purpose of obtaining funds in the drawee bank's country. Such bills are known as *finance* or *loan bills*.

Time bills. Time bills, both commercial and bankers', are sometimes classified into *long* and *short bills*. Sight bills and bills with maturities up to ten days are called *short bills*. The term *long bills* is applied to bills with maturities of at least two months.³

Use of bills of exchange in international settlements. We may, for convenience, think of foreign bills of exchange as having their origin in the transactions of American exporters who ship goods and draw drafts (on foreign buyers) ordering payment of the required amount in foreign currency. The exporters would like to exchange these orders for American dollars. On the other hand American importers with remittances to make desire to exchange their dollars for drafts calling for payment in foreign currencies. There are, of course, difficulties which prevent the exporter from selling his foreign bills of exchange directly to the importer. In addition to the physical difficulty of making contact, there is the question of size and maturities to consider. Foreign exchange merchants quite naturally developed as go-betweens for the buyers and sellers of foreign exchange.

The foreign exchange bank stands ready to purchase foreign bills from the exporters or other commercial drawers at the current rate of exchange. It buys both sight and time bills. These bills are collected when due through a foreign branch or foreign correspondent, which credits the proceeds to the account of the American bank. It is against these collected funds in foreign banks that the bank

³ Spalding, W F, *Foreign Exchange and Foreign Bills*, London, 1932, pp. 94, 99.

then draws the drafts or bankers' bills which it sells to Americans wishing to remit abroad.

The Rates of Exchange

Meaning of foreign exchange rates. The rate of exchange on a foreign country is the price of bills of exchange payable in that country. Thus the rate on London is the price here, in dollars, of a pound sterling draft. The price of bankers' sight bills may be considered the basic rate of exchange.⁴ Ordinarily published quotations are for sight bills. It is possible, however, for an American to purchase a cable transfer at a somewhat higher price than that of the sight draft or bill.

Maturities of bills and the rate of exchange. The highest rate or price charged for a bill of exchange is for the cable transfer calling for immediate payment. The banker's sight draft costs somewhat less because the banker in America has a double use of the money received from the buyer during the interval of time elapsing when the draft is sent across and collected. In contrast to the sale of a cable transfer, the sale of a sight draft enables the banker to obtain interest, at the foreign rate, for the time the bill is uncollected. Time drafts or future exchange drafts bring a still lower price than the sight drafts, the difference being determined by the foreign interest rate and the time between the date of sale and the payment of the bill.

Origin of the bill and the rate of exchange. Commercial bills, drawn by exporters, sell at a still lower price than bankers' bills of similar maturities. The highest priced commercial bills are sight bills drawn on well-known bankers under letters of credit. The price of such bills will be less than the price of bankers' sight bills by the amount of the commission or profit which the foreign exchange

⁴ There is some argument as to whether the cable rate or the sight draft rate is the true basic rate of exchange from which other rates are derived. See Spalding, W. F., *op. cit.*, p. 95.

banker requires. Bills drawn on commercial firms instead of on banks sell for still lower prices, since the element of risk is somewhat greater.

The differences in rates for bills of different types is shown in the following list of published closing sterling rates for April 10, 1936:

Cable transfers	\$4 94½
Bankers' sight drafts	4 94½
Commercial sight drafts	4 94
Seven day grain bills	4 93½
Sixty day bills	4 93
Ninety day bills	4 92½

Factors affecting the basic rates The price of foreign bills, or the rate of exchange, depends fundamentally upon the forces of supply and demand. At any given time, the supply of commercial bills offered for sale in American foreign exchange centers depends upon the value of American exports (both visible and invisible). If the supply of such bills offered for sale is in excess of the demand for foreign bills on the part of Americans wishing to make remittances abroad, the price will fall. If the supply is relatively small, the price will rise. Thus a favorable balance of indebtedness will depress the foreign exchange rate, while an unfavorable balance will raise it. Whether the rates are high or low, the exchange banker endeavors to buy bills cheaper than he sells them in order to preserve his margin of profit.

The gold points. Fluctuation in rates of exchange on gold standard countries are subject to very definite limits through the effect of the gold points or specie points. At times when America has a favorable balance of indebtedness, foreign rates of exchange tend to fall. Their fall is limited, however, to the gold import point. This point, marking the minimum price at which bankers' bills will be quoted and sold, is determined by the *mint par* and the cost of importing gold.

Mint par is merely the relative amount of gold in the

standard money of the countries involved. Thus, before the World War, it was the ratio of fine gold in the standard gold coins of any two countries involved. Since the War, with gold largely withdrawn from circulation and lodged in the central banks, mint par has been determined by comparing the amount of gold into which the paper currencies of each country can be converted.

Method of computing gold import and export points. Let us suppose that an American foreign exchange bank finds itself besieged by exporters wishing to sell foreign exchange drafts. Let us suppose further that there are not enough American importers who wish to buy foreign bankers' bills drawn against the proceeds to be realized by the collection of the commercial drafts. The price quotations on bankers' bills and commercial bills will differ, of course, by an amount sufficient to give the exchange banker a profit. At how low a price will the banker be willing to sell his bankers' bills?

Before England abandoned gold in 1931 the mint par of exchange was $\$4.8665 = \text{\pounds}1$. This meant that a banker owning pounds in England could, if necessary, convert them into gold and return the gold to the United States, where it could be converted into $\$4.8665$. Hence $\$4.8665$, minus the costs of bringing the gold back, would fix the *lowest* price bankers' bills would sell for. This was the gold import point. The minimum price of commercial bills would be correspondingly lower. But foreign exchange rates will not necessarily fall to the gold import point each time a favorable balance of debt appears. If the American bank believes that the current oversupply of foreign bills is only seasonal, it may anticipate a reversal of the movement at a later date. If an unfavorable balance of debt is expected in the near future, foreign bills of exchange will tend to rise to the gold export point, and gold will be exported in order to establish pound credits against which to draw bankers' bills. The opportunity is therefore presented to hold foreign balances until the shift in trade cur-

rents creates a demand for them, rather than first to import and then to export the gold, thus making only expenses on the shipment. The banker, foreseeing a future rise in price of foreign bills, will invest his funds abroad until the new demand appears. The attractiveness of such an action will be affected by the interest rates abroad as compared with those at home.

Cost of shipping gold. The cost of gold shipments includes packing and shipping charges; insurance; such incidental costs as assaying charges, losses due to abrasion of coins if coins are shipped, and brokers' charges for handling the shipment; allowance for such contingencies as delay in shipment; and interest losses. The cost varies with the circumstances. Large shipments reduce the cost of handling. Interest, insurance, and freight charges are subject to fluctuations, while the selling price of gold abroad may fluctuate within narrow limits.

A New York bank, in estimating the cost of exporting gold, may not be required to include any interest. If gold can be withdrawn from the bank (or the mint) and put on board ship the same day, a sight draft drawn against the proceeds of this gold shipment may be sold to an American importer and sent abroad on the same ship. Thus the American bank will be losing no interest. However, if gold must be withdrawn some days before shipment, it may be impossible to sell sight bills against it so as to eliminate interest costs altogether. Moreover, delay in the conversion of gold abroad into foreign currency may involve an interest loss.

The cost of importing gold must include interest lost while the transaction is being executed. Disregarding profits, the lowest price at which bankers can buy prime commercial sight bills, when gold must be imported, is mint par less shipping costs and loss of interest for the time required to send the bills abroad for collection, convert the proceeds into gold, and reimport the gold. Thus the lowest price at which bankers could afford to offer their sight

bills drawn to offset purchased commercial bills would be similarly determined. Rather than actually reimport the gold, the banks would prefer to sell drafts at this price. Thus, in case of a fall in the price of sight bills to the gold import point, resulting from an excess of exports, the cost of gold imports would include interest for perhaps twenty days. If the gold import point is computed on the basis of the cost of converting existing balances abroad into dollars, interest on the return shipment of gold only would be involved. If a speculative movement resulting in pressure on foreign currencies develops, as occurs when there is a sudden loss of confidence, the price of bills need fall only to a point including interest during the time involved in the gold shipment itself. Before England abandoned the gold standard in 1931, the cost of shipping gold between New York and London fluctuated around two cents per pound sterling. The gold import point, therefore, fluctuated around \$4.8465, and the gold export point around \$4.8865.

Paper currency exchange rates. When a country's currency is not convertible into a fixed amount of gold, there is no gold export point to limit the drop in the price of bills payable in that currency. Since countries which have abandoned the gold standard normally continue to purchase or accept gold at the statutory price, they still technically have a gold import point limiting the maximum price of bills of exchange drawn on them. Since inconvertible paper currencies are almost always the result of internal inflation, there is little probability that they will rise in value to the gold import point.

The value of bills of exchange drawn on a paper standard country is determined primarily by the buying power of that currency at home as compared with the buying power of other currencies in their respective countries. This is necessarily so because such bills cannot be converted into gold but must be utilized to buy commodities or services. If, for example, American exporters have bills of exchange drawn on English banks payable in paper

pounds, they can be sold only to someone willing to purchase pounds with dollars. Fundamentally the demand for pounds (barring speculative influences) arises from the desire to purchase British goods. But pounds are only worth buying when, at the existing rate of exchange, British goods can be purchased and returned to America to be sold at a profit. The rate of exchange which permits trade between countries to proceed in a normal fashion is sometimes called "purchasing power parity." If bills of exchange drawn on the paper standard country are too high in price to make their use profitable for obtaining goods for export from that country (including services, travel, and so forth), they must become cheaper. Normally the rate of exchange on a paper standard country must be such as to maintain a balance between its import and export items.⁵

Because paper currency exchange rates are not anchored to any gold parity, they are particularly exposed to speculative pressure. If, for any reason, such as prospects for future inflation of prices in the paper currency country, speculators believe that future rates of exchange on that country will fall, they attempt to profit thereby by offering drafts payable in the paper currency in large amounts. This depresses the rate of exchange before the change in internal purchasing power of the currency actually materializes. Since any breath of rumor is sufficient to start such speculative movements, it is easy to see that financing of foreign trade under the circumstances becomes abnormally hazardous. To keep paper exchange rates free from such speculative activities, it may be necessary for the central bank or the government to acquire sufficient foreign funds and credits to enable it to support the domestic exchange rates against bear raids of the speculators. This is

⁵ Import and export items are used here to include both visible items (merchandise and specie) and invisible items, including shipping, insurance, security movements, interest on international indebtedness, foreign travel, and immigrant remittances

accomplished by the simple expedient of buying all domestic currency offered at what is considered a desirable rate, in exchange for bills on foreign countries. In this way exchange rates in paper standard countries may be given substantial stability

Use of Letters of Credit and Bankers' Acceptances

Bank credit substituted for individual credit. Because of the superiority of drafts drawn by exporters on banks under letters of credit, such drafts have come to play an important part in the financing of foreign trade. This is particularly true of transactions in which the exporter grants credit to the foreign importer. The difficulty of obtaining credit information, as well as the longer credit terms often required, makes the reliance upon the credit of a bank especially desirable^a

Bank credit is introduced into international trade finance through the use of the letter of credit and the banker's acceptance. For example, if an American exporter wishes to sell to a foreign importer on six months' credit, he may request the importer to furnish a banker's letter of credit authorizing the drawing of drafts on the bank instead of upon the importer. Since the bank promises to accept any drafts properly drawn under the terms of the sales agreement, the exporter obtains a banker's acceptance instead of a draft on the importer.

Letter of credit. The foreign importer who must obtain a letter of credit makes application to a bank satisfactory to the exporter. If the importer is a customer of such a bank, his application can, of course, be made directly. If he is not a customer of such a bank, he will make his application through his own banker. The bank to which application is made may be located in another city or even in another country.

The application for a letter of credit is usually a formal

^a Edwards, *op. cit.*, p. 39.

document in which the importer. (1) requests that the credit be issued or opened for a designated beneficiary; (2) describes the number, amount, and tenor of drafts which are to be drawn under the credit; (3) describes the bills of lading, insurance certificates, and other documents such as commercial and consular invoices, certificates of inspection, weight and health, and custom house declarations; (4) describes the origin and destination of the shipment; (5) describes the merchandise to be shipped; and (6) states the date of expiration of the credit.⁷ Further, the applicant must give the bank assurance that: (1) he will provide funds to meet the draft when due; (2) he will pay all expenses and the bank's commission; (3) title to the goods will remain in the bank until it is reimbursed; and (4) the bank may take any necessary steps to protect itself against loss.⁸

If the bank is willing to issue the letter of credit, it proceeds to do so either by cable or by mail. If the credit is issued by cable, the bank instructs a certain correspondent bank in the exporter's country to notify the exporter (or beneficiary) of the credit and the terms on which he may draw drafts thereunder. If notification is by mail, the letter of credit may be given to the importer, who sends it directly to the exporter.⁹ The letter of credit may contain an agreement by the issuing bank to honor drafts only when accompanied by stated documents. This is known as a "documentary letter of credit." If it contains no mention of such requirements, it is known as a "clean credit."¹⁰ If the issuing bank does not reserve the right to revoke the credit, the letter of credit is said to be "irrevocable" and cannot be canceled before the date of expiration. Such a credit can further be strengthened by being "confirmed" by the foreign bank, which notifies the beneficiary and under-

⁷ *Federal Reserve Bulletin*, October, 1921, pp. 1170-1174

⁸ Cross, Iia B., *Domestic and Foreign Exchange*, 1923, pp. 240-241

⁹ *Federal Reserve Bulletin*, October, 1921, p. 1172

¹⁰ *Ibid.*, February, 1921, p. 158

takes to honor the drafts in case the issuing bank should fail to do so. So long as the terms of the credit are carried out, the importer cannot compel the issuing bank to cancel the credit on account of breaches in the sales contract by the beneficiary. If the letter of credit is revocable, the issuing bank may reserve the right to revoke the credit without notice to the beneficiary. Such a credit is obviously of little value, is little used, and should not be classified as a letter of credit. In other cases revocable letters of credit may be revoked if the beneficiary is notified before he presents his drafts for negotiation.

Import and export letters of credit. In the preceding discussion we have assumed that the issuing bank is located in the importer's country. Under those circumstances the bank is said to issue an "import letter of credit." Sometimes the exporter may desire to avoid exchange fluctuations. In this case the agreement may call for the furnishing of a letter of credit by a bank in the exporter's own country, entitling the exporter to draw drafts on it payable in his own country's currency. The importer, through his bank, must arrange for a letter of credit by a satisfactory bank in the exporter's country. Such a letter is called an "export letter of credit."

Letters of credit for financing shipments between foreign countries. Sometimes the exporter desires a letter of credit issued by a bank in a third country. If so, the importer must make proper arrangements with such a bank. For many years British banks have engaged in the practice of issuing letters of credit to finance shipments between foreign countries. Since the War, American banks have also participated in such financing. The demand for this service arises out of the superiority of drafts drawn under such letters of credit over drafts drawn on banks in either the importing or the exporting countries. The superiority of such drafts in the mind of the foreign traders may arise out of: (1) the greater stability of exchange rates on the issuing country; or (2) the better price at which such bills

may be sold. Thus, during the post-War period New York banks enjoyed the benefits of the undoubted prestige of the American dollar in a world of depreciated and uncertain paper currencies. The British banks have long enjoyed the advantages of a world demand for pound sterling drafts, arising not only out of the need for sterling funds to pay for British exports, but also from the fact that the highly developed discount market in London for the acceptances of British banks enabled foreign exporters to realize the highest possible amount through the discount of London drafts.

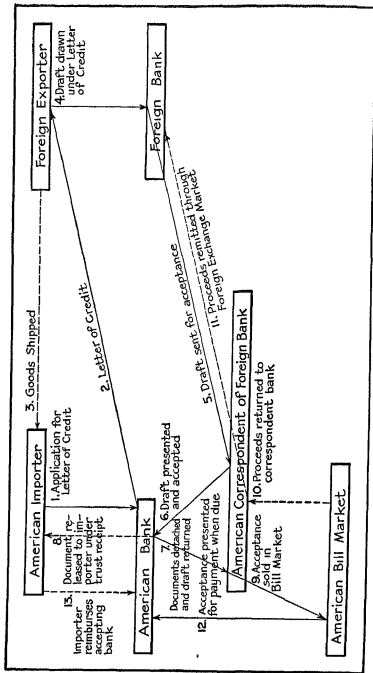
The banker's acceptance. We have already studied the acceptance powers of American banks in Chapter XIII. The member banks, since 1913, have had acceptance powers to finance imports, exports, and trade between foreign countries. The use of American bankers' acceptances to finance imports involves: (1) the issue of a letter of credit; (2) the drawing of a draft (or drafts) by the beneficiary or foreign exporter under the letter of credit; (3) the discount of the drafts by the exporter at his bank; (4) the presentment of the drafts for acceptance, through an American correspondent or branch of the exporter's bank, to the American drawee bank; (5) the acceptance by the drawee bank, which detaches the documents if any are attached to the draft; and (6) the holding of the accepted draft until maturity for the benefit of the foreign bank or its sale in the American discount market. If the draft is sold in the American discount market, the foreign bank is in possession of dollars which it may hold as deposits in American banks, invest in the American money market, or transfer back home through the foreign exchange market. If the foreign exporter prefers, he may use his bank as a collection agency only, instead of discounting the draft outright.

In case American acceptances are used to finance exports, the foreign importer must arrange through his bank to have the American bank issue a letter of credit to the American exporter. The exporter then draws a draft (or drafts)

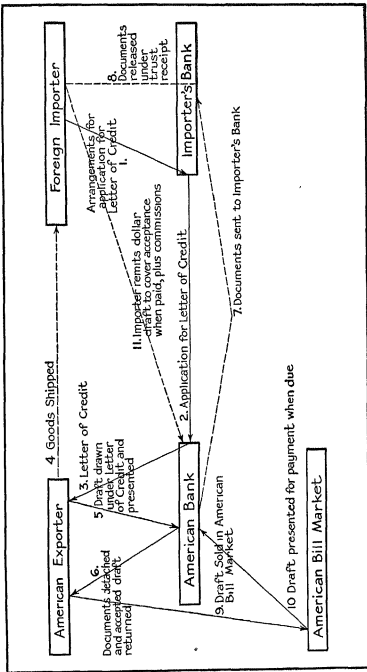
under the letter of credit on shipment of the goods and discounts the draft with his bank. The draft, with the proper documents attached, is presented for acceptance, the documents are detached by the accepting bank, and the draft is discounted in the American bankers' acceptance or bill market. The documents will be forwarded to the foreign bank which arranged the credit, so that the goods may be released to the foreign importer. The amount realized by the exporter on his draft will be determined by the length of time the draft has to run until maturity and the rate of discount in the American bill market. The foreign importer, of course, must be prepared to buy a dollar draft in the foreign exchange market to send to the American accepting bank in time to reimburse it when the accepted draft becomes due and is paid.

When American banks issue letters of credit and accept drafts to finance shipments between foreign countries, the procedure differs only slightly from that already described. In this case the exporter ships his goods to the importer of another foreign country, draws a draft under the letter of credit, and discounts it with his local bank. This bank will forward the draft, through its American correspondent, to the American drawee bank for acceptance. The accepting bank detaches the documents and sends them to the foreign importer's bank for which it issued the letter of credit. The draft may then be discounted in the American bill market and the proceeds remitted to the exporter's bank through the foreign exchange market.

Finance bills and loan bills. Finance bills and loan bills are time drafts drawn by the banks of one country on their correspondents abroad. They are used for the purpose of enabling the banks to take advantage of expected shifts in the foreign exchange rate. For example, if a London bank believes that sterling exchange rates in New York are likely to fall in the future because of an expected seasonal excess of exports from the United States to England, it may instruct its New York correspondent to draw



Financing an Import



Financing an Export

a ninety day draft on itself. This draft will be sold in the foreign exchange market in New York at the prevailing rate of exchange for ninety day drafts (sight draft rate less the interest for ninety days). American banks wishing to sell sight drafts on London can purchase these ninety day finance bills, send them across for acceptance, discount them in the London bill market, and use the proceeds to build up their balances abroad. The New York bank lends the proceeds realized by the sale of the finance bill, for the benefit of the London bank, in the American money market for ninety days. When the finance bill is presented for payment by its London holder to the London accepting bank, the loan in New York matures, and the proceeds are utilized by the New York bank to purchase sterling exchange for remittance to the London bank. If, as expected, sterling exchange rates have declined, the London bank will realize a profit. If the exchange rate when the finance bill was first drawn was \$4 87, for example, a draft for £1,000 would bring \$4,870 (less the interest for ninety days). When the transaction matures, the rate of exchange has fallen perhaps to \$4.85. The \$4,870 (including interest earned, if the same as the London rate) could be converted into £1,004.12 ($4,870 \div 4.85$), with a profit of £4.12. In addition, if the London discount rate is below the New York discount rate when the finance bill is drawn and sold, the London bank will gain on the difference, since the price (in dollars) realized on the sale of the ninety day bill is reduced by the amount of the discount for ninety days at the London rate, and the offset for this is the higher loan rate for the funds in New York. The New York bank receives a commission for its part in the transaction.

If a New York bank takes the initiative in the drawing of the finance bill on the London bank, the opportunity for gain, arising from differences in money rates at home and abroad and from an expected decline in foreign exchange rates, rests with the New York bank. Likewise, of course, the New York bank bears the risk of loss in case the ex-

pected fall in the foreign exchange rate should not materialize. The London accepting bank in the present illustration would only obtain the commission for its acceptance. The American bank may lend the proceeds of such drafts to borrowers who agree to repay by furnishing sufficient funds to purchase a sterling draft at maturity. In such a case the borrower takes the risk of exchange fluctuations.

The effect of finance bills is to anticipate future movements in foreign exchange rates and in a measure to offset them. To revert to our illustration, when finance bills are drawn on London banks in anticipation of a future decline in sterling rates, the effect is to increase the supply of sterling bills in the existing money market. True, these are ninety day bills, but there is a possibility that they can be bought and discounted abroad by New York foreign exchange dealers and the proceeds used for drawing demand drafts or cable transfers. The effect is, therefore, to reduce sterling exchange rates at once. When the finance bill matures and the American bank must purchase sterling sight drafts or cable transfers to repay the London bank, London exchange is forced up beyond what it would have been had the finance bill transaction not been carried through.

In addition to the tendency which the use of finance bills has of reducing fluctuations in rates of exchange, there is some effect on the discount rates of the countries involved. If the discount rates are higher in New York than in London at a time when sterling exchange is high and likely to go lower in the future, there will be an added incentive for the use of these finance or loan bills. Their use, as we have seen, reduces the price of sterling bills at the time and may be effective in preventing an outflow of gold to London which would otherwise take place. This in turn tends to hold the New York money rates down.

American member banks are allowed to accept loan bills drawn on them by foreign banks to a limited extent and under the regulations of the Board of Governors of the

Federal Reserve System. These regulations permit the acceptance of drafts drawn by non-European foreign banks which are in need of dollar exchange to enable their customers to pay for imports from the United States when such exchange is lacking. The need is supposed to grow out of the seasonal nature of foreign trade.

Forward exchange. An American exporter may expect to ship goods abroad at some future time, say, a month hence. If he wishes to know definitely what he will realize on drafts which he expects to draw, he goes to the foreign exchange dealer and sells foreign exchange for future delivery; that is, when the time comes to ship the goods and draw drafts against the shipment, he will be able to sell the drafts at a fixed price already agreed upon. The bank is able to assume the risk of fluctuations in exchange because of its superior knowledge of trends of exchange rates and because of the possibility of hedging its purchase. Its profits, if any, come from the willingness of the exporter to sell "future exchange" at a rate cheaper than that existing when the time arrives to complete the sale. Naturally the banker may sometimes misjudge the market, in which case he loses. Further, the bank may be able to sell future exchange to some American importer who expects to need foreign exchange drafts a month later. If the bank is able to do this, it can hedge its purchase of future exchange by a sale and abolish the risk for itself, the importer, and the exporter. An individual bank may hedge its sales of future exchange by purchasing long bills of suitable maturities from other dealers, who then assume the risk.

Arbitrage and Three-Cornered Exchange

Arbitrage. A perplexing problem often arises in the student's mind from the fact that foreign trade between two countries may be settled in terms of the currencies of either country (or, for that matter, of a third country). Americans exporting to England frequently draw drafts

payable in sterling and these create sterling exchange in New York. American importers purchase bankers' bills drawn against the proceeds of such commercial bills. There is no assurance, however, that these will be equal, that all American exporters will draw drafts payable in pounds, or that all American importers will purchase pound sterling drafts. Indeed, it is possible to imagine a case where all exporters, regardless of which country they represent, sell only on terms permitting them to draw drafts on foreign buyers payable in the exporters' currency. Thus American importers would be compelled to remit sterling drafts to pay for their imports, while English importers (to use the familiar New York-London illustration) would demand dollar drafts. Yet the English banks would receive no dollar commercial drafts with which to build up their dollar balances, and American banks would receive no sterling commercial drafts with which to establish sterling balances. We might then be faced with the ridiculous situation where banks in each country would be shipping gold abroad to establish balances against which to draw drafts.

It is here that the arbitrage operations of the foreign exchange dealers come into play. Let us suppose that, because of the unwillingness of both English and American exporters to take payment in anything but their own currencies, foreign rates of exchange in both New York and London are high. If sterling drafts sell in New York for \$4.88, and dollar drafts sell in London at the rate of \$4.84 per pound sterling, there is a great opportunity for profit through arbitrage transactions. A New York dealer, in communication with his London correspondent, orders the London correspondent to sell cable transfers payable in dollars at \$4.84 per pound and to credit the pound sterling to his account. The New York dealer is thus able to obtain a pound sterling in London by paying out \$4.84 in New York. He then sells pound sterling cables in New York at \$4.88 against his sterling account and realizes \$.04

per pound, minus incidental costs, on each transaction. This arbitrage operation will continue until the New York price of sterling exchange is so near the London price of dollar exchange that no profit remains. Thus, regardless of the terms of settlement which foreign traders may use, the rate of exchange is substantially the same in either country.

Three-cornered exchange. To introduce a more realistic note into the foreign exchange discussion, it is necessary to consider the fact that international trade is not a simple two-sided matter between two countries but that it involves a multitude of transactions of different kinds among many countries. It is highly unlikely that the exchange of visible and invisible items between any pair of countries will be exactly equal. The United States may have an export excess to England and Japan. England and Japan may have export excesses to South American countries, while these countries in turn may have export excesses to the United States. Under these circumstances sterling bills and Japanese yen bills will be cheap in New York, South American drafts will be cheap in London and Japan, while dollar drafts will be cheap in South America. In such a case the New York foreign exchange dealer would purchase cheap sterling drafts, utilize the proceeds to purchase cheap South American drafts in London, and use the South American funds to purchase cheap dollars. This would continue until the rates of exchange became so adjusted as to yield no arbitrage profit. The value of drafts on London and Japan would, therefore, reflect not only the net excess of our exports to England and Japan, but also our net imports from South America.

If all international transactions were settled in terms of the currency of one country, the case would be simpler. Before the War the bulk of international trade was financed by the British banks. Exporters in the United States sold and drew drafts in terms of pound sterling. If South

American countries bought from England, they agreed to pay in pound sterling. If Americans sold more to England than they bought, the excess of pound sterling exchange arising could always be used to pay for any imports from South America in excess of exports to it. Only when the United States showed a net excess in the value of exports to the whole world would the value of sterling exchange decline in New York.

Sale of Foreign Exchange by Inland Banks

Banks located in cities where foreign exchange transactions are unimportant cannot afford to carry foreign balances. Any occasional commercial drafts drawn on foreign countries which are offered will therefore be handled through a city correspondent equipped for the task. If local customers desire to purchase foreign exchange drafts from the inland bank, the bank sells drafts drawn on a foreign correspondent of the city bank. The city bank furnishes the proper blanks and notifies the inland bank of the rate which it must pay for any drafts drawn. The inland bank, in turn, charges the local customer a rate high enough to cover its costs and its profit margin. The city bank bears the risk of a rise in the rate of exchange while its stated rate to the inland bank is in force.

The Federal Reserve Banks and the Foreign Exchange Market

Before the War the supremacy of the London banks in the field of international trade finance was unchallenged. London bills were to be found in all foreign trade centers, for they were everywhere desired. Not only were London bills needed to pay for British exports, but they were also desired because of the well-known character of the accepting banks and the ease with which London bills could be disposed of in the London bill market. They were used to finance both British trade and trade between other coun-

tries. This position of the London banks was weakened during the War when American bankers acquired the right to accept bills and proceeded to take an active part in financing international trade. To a very considerable degree the growth of this activity by the American banks has been dependent upon the development of the American open market for bankers' acceptances. Only when there is an opportunity to discount bankers' acceptances at as favorable a rate as can be had abroad will foreign trade be financed through American banks. Other things being equal, the money center with the lowest discount rates will tend to get the business. Naturally the bankers are interested in being able to participate in order to obtain the acceptance commissions. The dealers are pleased to have their opportunities for profit increase, while the general public is happy to know that our foreign trade and even that of other countries is being financed in America instead of London.

In 1914, when the Federal reserve banks were organized, we had no market for bankers' acceptances. If our banks were to make use of their new acceptance powers, a market had to be created. Two necessary elements make for a good acceptance market. First, there must be a well-developed demand for acceptances by investors. Second, there must exist a body of dealers to effect the distribution of the acceptances or bills from the persons for whom the acceptances are made to the ultimate buyers. The reserve bank authorities set themselves the task of creating and nurturing the market. The reserve banks, under the powers of Section 14 of the Federal Reserve Act, undertake to purchase all eligible bills offered in the open market at a fixed rate of discount. This buying rate is near enough to the market rate to make acceptances a desirable part of the secondary reserves of banks. At times the reserve bank buying rate has fallen below the rate at which bankers are willing to purchase acceptances, in which case the burden of supporting the market has fallen on the reserve

banks¹¹ To protect those dealers in acceptances who carry their stock with money borrowed on call, the reserve banks purchase acceptances under agreements to resell again at the same rate in fifteen days. If the call loan rates rise, the dealers are able to take refuge in sale under repurchase agreements. In the early days of the Federal Reserve System the rediscount rate on bankers' acceptances was kept below that for other forms of paper. This practice was later abandoned.¹² Not only do the reserve banks buy acceptances for their own account, but they also purchase and hold them for their foreign correspondents. Acceptances held for foreign correspondents are generally indorsed by the Federal reserve banks.¹³

¹¹ In some instances the buying rate appears to have dominated the market rates rather than vice versa. Hardy, *Federal Reserve Credit Policy*, p. 260.

¹² Hardy holds that there has never developed such an independent demand for acceptances in the United States as would make a satisfactory market. *Ibid.*, p. 259.

¹³ For a severe criticism of this practice, see Willis, H. Parker, *The Theory and Practice of Central Banking*, p. 228.

CHAPTER XXII

TRUST COMPANIES

A trust company is a corporation authorized by its charter to perform fiduciary functions. Although historically American trust companies originated largely as insurance companies, today the bulk of trust company business is carried on by institutions engaged in banking.¹ The early combination of trust company and banking functions was commonly brought about, especially in the East, by the expansion of trust companies into the banking field, a development which seems natural enough in view of the fact that it was an easy step from the handling of funds in trust estates to the receipt of deposits. In doing this the trust companies, free from any regulation on their banking business, enjoyed a very decided advantage over the regular commercial banks, which were subject to reserve and loan restrictions. The regular bankers complained vigorously about trust competition and by 1900 had quite generally succeeded in having trust companies brought under the supervision of state banking departments.² At the same time that trust companies were reaching out into the banking field, banks in turn were developing trust departments as side lines to deposit banking.

¹ Of thirty-nine corporations engaging in trust business before 1850, twenty-seven were also engaged in insuring lives or property, while the remaining twelve were banks. See Smith, James G., *The Development of Trust Companies in the United States*, 1928, pp. 278-280. This study contains an excellent account of the historical development and functions of trust companies.

² Smith, *op. cit.*, pp. 333-335.

Fiduciary Relationships

Trust company functions involve what may be called fiduciary relationships, wherein such a large degree of confidence is involved that the law requires the utmost good faith in all the transactions carried on between the parties. The functions of a corporate trustee are, of course, limited and determined by law and by the company's charter. For example, the Federal Reserve Act allows national banks to obtain permits from the Board of Governors "to act as trustee, executor, administrator, registrar of stocks and bonds, guardian of estates of lunatics, or in any other fiduciary capacity" in which competing state banks are permitted to function³

Because of the fiduciary nature of trust company functions, it is essential that care be taken not to commit a breach of good faith. One of the most important rules governing the operation of trust departments by banks is that relating to an absolute separation of property held by the trust department from the banking assets. Not only must the property be segregated, but the accounts must also be separately and individually kept. Thus it is impossible to get any inkling as to the condition of the trust business from the published statement of the ordinary banking trust company, because such a statement deals only with the affairs of the banking department. Seldom are any data published by individual companies in respect to the size and content of trust estates held by them. However, the rule of strict segregation is often relaxed in the case of cash funds held by the trust department and awaiting disbursement or investment. Trust departments are commonly permitted to deposit such cash with the banking department. National banks, for example, may deposit cash belonging to trust accounts with the banking department, provided such deposits are secured by the

³ Section 11 (k).

pledge of United States or other approved securities. The laws of some states, Ohio and Indiana, for example, provide that such deposits with the banking department become preferred claims in case the bank fails. Pennsylvania, on the contrary, prohibits the deposit of trust funds with the banking department.

Further to assure the proper performance of fiduciary duties, trust companies are sometimes required to deposit, with state supervisory authorities, certain minimum amounts of approved securities belonging to the company itself. Such securities are available to guarantee the financial responsibility of the trust company in case of some default on its part. In addition, the stockholders' equity in the trust company is available as protection for the trust estates in the event that losses are suffered for which the company is legally liable. Because of the segregation of trust department accounts from the banking department, it is possible for the bank to fail without seriously impairing the trust business in any way except by disqualifying the bank as a fiduciary agency because of its insolvency.

The trust relationship. A trust is a relationship between a person called the trustee and one or more beneficiaries, whereby the trustee has a legal obligation to deal with property placed in his control for the benefit of the beneficiaries. Either real or personal property may be involved in a trust, and the title of the trustee in such property may be either equitable or legal, in most cases the latter. A trust may be established without notice to the beneficiary and, indeed, without notice to the trustee, but either may refuse to become parties to it. If the trustee refuses to accept the duty of trusteeship, another will be appointed by an equity court if necessary to prevent the failure of the trust. If a vacancy appears in the trusteeship, a new trustee may be appointed according to provisions made by the trustor who originally created the trust or, in the

absence of such provisions, by a court of competent jurisdiction.

Although there are exceptional circumstances under which a trustee may directly obligate the trust estate by his contracts, ordinarily he may not do so but may bind only himself. However, if he makes contracts which are within the expressed or implied powers conferred upon him, he may recover from the estate any reasonable and fair expenditures which he has made. Further, a trustee is personally liable for any of his own torts or for those of his agents, but may recover from the trust estate for tort liabilities incurred while acting with reasonable prudence and diligence in the administration of the trust. When the trustee claims compensation from the estate, the beneficiary may protect his interest by appearing before the court which must approve of such claims. Trustees may have express or implied power to sell property according to the directions contained in the trust instrument or under the orders of the court, and they may also bring action in law to protect the interests of the trust estate.

A trustee is not an insurer of the integrity of the trust estate but is liable only for the exercise, in good faith, of ordinary care, skill, and prudence. By this is meant that he is not necessarily responsible for errors of judgment which result in loss, but he is required to exercise the utmost good faith and to act solely in the interest of the beneficiary. In respect to the investment of funds belonging to the estate, the trustee must use reasonable care. If the trustor has dictated the nature of the investment, the directions must be followed except in cases where courts of equity, with the consent of all persons interested in the trust, permit deviations from such directions to protect the interests of the beneficiaries. If the trustee is in doubt as to the proper investments to make, he may seek the advice of the court, whose decrees must then be obeyed if the trustee wishes to avoid liability for any losses. In

many states laws have been passed regulating investments which trustees may make in the absence of contrary directions from the trustor. Certain general common law rules have grown up governing the investments to be made by trustees. Ordinarily trustees must not make loans on personal security or invest trust funds in real property or in trade and business. Further, investments in bonds and mortgages secured by real estate located in other states are frowned upon because such investments fall under the jurisdiction of the courts of such other states and are therefore subject to some additional uncertainty. First mortgages on real estate and government securities are, however, considered good investments for trust funds. Trustees who make improper investments may still escape liability by proving that the beneficiaries, in full knowledge of the facts and free from any legal disability, consented to such investments.

A trustee, when called upon by the beneficiary, is legally bound to furnish an accurate and complete record of the affairs of the trust estate. He is further required to render to a court of competent jurisdiction a report of all his actions. The beneficiary at such a time may exercise his right to object to any improper practice which may have taken place. Once the court has passed upon and approved the trustee's actions, such actions cannot be objected to by the beneficiary except upon the grounds of fraud or error.

The amount of compensation of a trustee may be determined by contract between the trustor and the trustee or, in the absence of such contract and any statutory rules it may be determined by the court.

Executorship and administratorship. An executor of a will, like a trustee, normally holds legal title to the property, but his duties are limited to taking control of the testator's estate, the payment of claims, and the distribution of the estate as provided by law and by the will. His duties, therefore, are temporary in nature. An adminis-

trator is likewise one who, under appointment by a court, takes title to the property of the deceased person to carry out the necessary functions of paying claims and distributing the property. The distinction between an administrator and an executor is found in the fact that the former is appointed by the court to attend to the disposal of the estate of a person who has died intestate, or without making a will, or who, in making a will has failed to name an executor.

Guardianship and conservatorship. A guardian is a person appointed by will and approved by the court or appointed directly by the court to care for the interests of an infant. In some states the guardian is said to hold legal title to the infant's property, while in other cases he has only the right to possession and power to deal with the property. A conservator is appointed by the court to administer the property of an insane or otherwise legally incompetent person.

Agencies and custodianships. Frequently it is desirable to transfer property to another person either for safekeeping or for the performance of certain duties. These needs give rise to custodianship and agency agreements under which the trust company (or other fiduciary) obtains possession of the property but no title. Thus securities may be deposited with the fiduciary, who acts as broker in buying and selling, keeps necessary records, and handles the various details incident to ownership of the securities. Fiscal agencies are frequently appointed by corporations to handle such matters as paying dividends on stock and interest on bonds and managing sinking funds. Corporations frequently appoint trust companies as transfer agents of stock with the duty of keeping the stock transfer book and a complete record of the stockholders. In addition, trust companies are often appointed registrars of stock with the duty of keeping an accurate record of the volume of stock outstanding to prevent overissue arising from errors

in the course of stock transfers. Sometimes trust companies are appointed depositories under reorganization agreements.

Escrow agreements. When a person wishes to make a transfer of property to another person, conditioned upon some performance of the transferee, it may happen that neither party trusts the other, and that therefore neither wishes irrevocably to perform before being satisfied with the other's performance. Under these circumstances the property may be deposited with a trustee in escrow, with the understanding that it will be delivered upon the fulfillment of the required condition.

Classification of fiduciary activities. Fiduciary activities may be classified according to: (1) whether the authority arises out of agreement or by court order; and (2) whether it is carried on for an individual or a corporation. These two classifications are combined below.

1. Fiduciary activities for individuals.

(a) By agreement.

- (1) Voluntary trust or deed with a living trustor.
- (2) Testamentary trusts created by appointment of the trustee by will (as executor and trustee).
- (3) Custodianships and agency agreements, including escrows.

(b) By court appointment.

- (1) Administrator, guardian, and conservator.
- (2) Receiver and assignee.

2. Fiduciary activities for corporations.

(a) By agreement:

- (1) Trustee under bond issue in which the mortgage deed is transferred to the trustee for the benefit of the bondholders.
- (2) Transfer agent and registrar of stock.

- (3) Fiscal agent.
- (4) Custodianship and escrow.
- (5) Depositary under reorganization plans.

(b) By court appointment: receiver and assignee.

Advantages of corporate trustees. Trust companies could hardly have grown to their present proportions had they not rendered a service superior to that of private trustees. Their services have proved especially valuable in the case of fiduciary activities performed for corporations. Trustees holding deeds of trust and mortgages securing bond issues need a more continuous existence than that afforded by an individual. The corporate fiduciary is, of course, free from the limitations arising from the uncertainties of human life and can therefore offer continuity of service both to corporations and to individuals. Transfer agents and registrars of corporate securities require large and accessible facilities which corporate fiduciaries are particularly well equipped to furnish. Moreover, the trust company can easily be located; it does not move away or abscond with trust property. It offers financial responsibility both through its invested capital and through the deposit of securities with state authorities. This, however, is partially offset by the fact that trust companies are often not required to give the bond required of individual trustees. Finally, a trust company of substantial size can assemble an experienced group of specialists in its trust department who can perform their duties more effectively than can any individual acting alone.

Objections. On the other hand certain objections to corporate as compared with individual fiduciaries may be mentioned. The trust company, while prone strictly to obey the law, may at times adopt an attitude of inflexible conservatism which is inimical to the best interests of the beneficiaries. Trust companies with a small volume of trust accounts may be compelled to leave the administration of trust business to someone quite unexperienced and may be unable to furnish as skilled and intelligent manage-

ment as an individual could give. The practice of trust departments of depositing trust funds with the banking department has been criticized on the grounds that, although the trust may receive interest on such deposits, the company makes a profit on the loan of these funds by the banking department for which it makes no accounting to the trust account. Abuses of the fiduciary relationship have arisen in cases where the trust officers purchased securities for trust estates from the bond department or from a security company affiliate.⁴ With the abolition of security company affiliates of all banks of deposit and the restriction on underwriting by member banks, this danger has been diminished. It is still a wise rule in trust department management that no dealings should take place between that department and other departments of the institution.⁵

Advantages to banks in having trust departments. The primary benefit which a bank hopes to obtain from maintaining a trust department lies in the profits of its operation. Although some states require larger minimum capital for trust company banks than for those without these powers, there is normally some expectation of advantage in being able to support both the banking and trust departments upon the same stockholders' investment. The small companies hope to get along with little increase in either overhead or direct expenses by utilizing existing space and personnel. The earning power of small trust departments, however, may easily be exaggerated. In many communities banks are maintaining trust departments which are

⁴ On this point, see Smith, *op. cit.*, pp 482-483. See also Kirkbride, F B, Sterrett, J E, and Willis, H. P., *The Modern Trust Company*, 1921, p 6. The latter book, while devoting considerable space to the problems relating to the banking department of trust companies, describes in detail the more mechanical aspects of trust department operation.

⁵ For some evidence of such practices in which securities underwritten by trust companies or their security company affiliates were sold to the trust estates at a profit, see "Stock Exchange Practices," *Hearings of the Committee on Banking and Currency of the United States Senate*, 73d Cong., 2d sess., p 8069.

not only unprofitable now but have little prospect of ever becoming profitable. It has been estimated that until trust assets amount to \$3,000,000, it is impossible to develop a trust department into a complete unit.⁶

To some extent the problem of the small and unprofitable trust department may be solved by the development of branch banks. The branch banking systems in California have experimented with a state-wide trust service. Attached to each main or district office are highly trained trust men who visit branches, interview prospects for trust service, and develop the contacts made by the branch managers, who also have been trained in trust business at the head office. Each branch maintains its own records, but highly specialized skill is available through the supervising officers.⁷

Besides the profits anticipated from the operation of trust departments, certain collateral advantages may accrue. The trusteeship of a large estate usually brings the business of that estate to other departments of the bank. New contacts with prospective bank customers may be made through trust departments. Obviously such opportunities exist only for the large and well-established trust companies, and these advantages are unimportant in the case of the smaller trust departments. In fact, the small trust company with its lack of experience in fiduciary matters may become involved in litigation and losses which will have to be borne by the stockholders.

The concentration in trust company business. Although there are many institutions which maintain trust departments, a high degree of concentration exists. For example, in the year 1924 the property (exclusive of mortgages and deeds of trust to secure bond issues) being

⁶ Driscoll, John J., Jr., speaking before the New Jersey Bankers Association, in *Banking* (digest), December, 1936, p. 8.

⁷ "Branch, Chain, and Group Banking," *Hearings Before the Committee on Banking and Currency of the House of Representatives*, 71st Cong., 2nd sess., pp. 1404-1407, Exhibit N, by W. J. Kiefferdorf, Vice-President, Bank of Italy National Trust and Savings Association.

administered by the trust departments of all banks in the state of Illinois was valued at \$2,015,437,000. Of this, \$1,300,000,000 worth was held by the trust departments of three of the five important Chicago trust companies. In 1928 the trust property held by Chicago banks amounted to \$3,536,204,000, which was 87.6 per cent of the total trust property held by trust companies in the state of Illinois at that time.⁸ The reasons for this concentration can be found: (1) in the general concentration in financial centers of large fortunes, the owners of which are the most conspicuous creators of individual trusts; and (2) in the fact that large and important trust accounts gravitate to trust departments of size and reputation, such as those to be found only in the large city trust companies. The tendency to concentrate is further accentuated by the fact that large city departments are able to attract and handle corporate business. Because of their location, the trust companies in New York City are especially adapted to act as registrar, transfer agent, fiscal agent, and trustee for bond issues.

The particular distribution of different types of fiduciary business and assets held thereunder varies widely from one trust company to another. Tables XXXI and XXXII may be taken as illustrations of the nature of trust company work.

Trust Company Powers of National Banks

Origin of trust company powers of national banks. As a means of making national charters more popular in the face of mandatory membership in the Federal Reserve System, the Federal Reserve Act, as originally passed, permitted national banks to engage in fiduciary activities, when not in contravention of state or local law, upon obtaining the consent of the Federal Reserve Board. Naturally the state-chartered trust companies objected to the invasion of their field by national banks, and they were instrumental in bringing the controversy into the courts for determina-

⁸ *Statement of the State Banks of Illinois, 1928*, p. 45.

TABLE XXXI

PERCENTAGE DISTRIBUTION OF ASSETS AND LIABILITIES OF THE TRUST DEPARTMENTS OF TRUST COMPANIES IN CHICAGO, 1928 (EXCLUSIVE OF TRUSTEESHIPS FOR BOND ISSUES) *

<i>Assets</i>		<i>Liabilities</i>	
Cash on hand	2.6%	Under agreement and trust deed	37.20%
Real estate	4.8	Under decrees of court and wills	12.10
Other personal property	92.2	Executor and administrator	2.10
		Guardian and conservator	.50
		Escrow	4.50
		Assignee and receiver	.06
		Agent, depository, bailee, custodian, safekeeping, fiscal agent	43.20

* Compiled from data given in *Statement of the State Banks of Illinois, 1928*, p. 45. This information was not published for later years.

TABLE XXXII

CLASSIFICATION OF TRUSTS OF NATIONAL BANKS
AS OF JUNE 30, 1935 *

<i>Assets</i>		<i>Percentage of Total Assets</i>	<i>Liabilities</i>	
Investments			Private trusts	\$7,637,917,488
Bonds	\$4,066,253,995	43.9	Court trusts	1,613,374,459
Stocks	2,442,393,659	26.3		
Real estate				
mortgages	663,917,016	7.1		
Real estate	597,552,219	6.4		
Miscellaneous	571,841,145	6.2		
Total	\$8,341,958,034			
Deposits in banks				
In savings banks ...	\$20,206,950	.2		
In other banks	8,277,424	.2		
In own banks	354,342,666	3.8		
Other assets	526,506,873	5.7		
Total trust assets	\$9,251,291,947		Total trust liabilities	\$9,251,291,947

* *Annual Report of the Comptroller of the Currency, 1935*, pp. 16, 21. These trust assets are separate and distinct from mortgages and trust deeds held by the trust departments of national banks to secure bond issues amounting to \$11,895,145,026. National banks were also named under insurance trust agreements as trustees to receive and administer the proceeds of outstanding policies amounting to \$681,142,424.

tion. State courts in both Illinois and Michigan refused to permit national banks to exercise fiduciary powers. Two main objections were raised. First, Section 11 (k), granting fiduciary powers, was held to be unconstitutional and in excess of the congressional power. Second, it was held to violate state law on the grounds that state supervisory authorities regulating trust companies would have no power to enforce their regulations on national banks.⁹ However, the constitutionality of Section 11 (k) was definitely established in a decision of the United States Supreme Court on June 11, 1917.¹⁰ The Federal Reserve Act was amended September 26, 1918, to provide that whenever the laws of any state permit state banks, trust companies, and other corporations competing with national banks to exercise fiduciary powers, the exercise of such powers by national banks shall not be deemed to contravene the state or local law. Further, state authorities were given permission to examine and regulate the activities of the trust departments of national banks and to subject them to the same requirements in respect to capital stock and the deposit of securities with state authorities as apply to state trust companies. The Supreme Court decision, together with this amendment to the law, established the rights of national banks to qualify as trust companies wherever state-chartered trust companies engaged in banking. Nevertheless the matter was not finally settled until 1924, when the Supreme Court affirmed the right of national banks to operate trust departments in the state of Missouri, which permitted the operation of trust companies but denied trust powers to state banks.

Effect of mergers on trust powers. Some question arose as to the status of fiduciary activities undertaken by national banks and by state banks upon merger with other national banks. It was uncertain whether or not the con-

⁹ Tippets, Charles S., "Fiduciary Powers of National Banks," *American Economic Review*, September, 1925, pp. 420-421.

¹⁰ *Ibid.*

solidation of a state bank operating a trust department with a national bank would permit the assumption by the national bank of the trust commitments of the state bank. This uncertainty prevented the consolidation of state bank affiliates with national banks under national charters after such consolidation seemed otherwise desirable. An amendment of February 25, 1927, to the national banking law included an express provision to the effect that upon the consolidation of a state bank with a national bank under a national charter, the latter bank has the right to succeed to the fiduciary capacities of the state bank. This enables national banks to succeed to trusteeships, executorships, and other fiduciary appointments under which the state institution was previously acting, and to trusteeships and executorships under designation of wills not effective at the time of consolidation.¹¹ This right of succession by the national bank was somewhat clarified by an amendment added in 1933.

The rapid development of trust business in national banks that has occurred since the amendments of 1927 is indicated by the fact that during the nine year period 1926 to 1935, the value of assets of trusts administered by national banks increased by \$8,328,963,270, or 903.04 per cent, and the volume of note and bond issues outstanding for which national banks were acting as trustees increased \$9,141,591,710, or 371.07 per cent.¹²

Earnings of Trust Departments

Because so little is known about the trust department activities of the state-chartered institutions, one cannot measure with any accuracy the relative importance of trust department earnings. Without doubt, the lion's share of trust business is still in the hands of the state-chartered companies, in spite of the rapid growth that has been made

¹¹ 44 Stat 1224, Ch 191.

¹² *Annual Report of the Comptroller of the Currency*, 1935, p 14.

in the trust business of the national banks during the past nine years. In many of the state institutions trust business is a very important phase of the general activities and must contribute a substantial part of the company earnings. This is less true of the national banks in which commercial banking commands the major part of the energies of the staff and the trust business is relatively unimportant. For this reason the available data on the earnings of the trust departments of national banks are not to be taken as representative of trust companies as a whole. Even so, the information given in Table XXXIII is enlightening.

TABLE XXXIII

EARNINGS OF TRUST DEPARTMENTS OF NATIONAL BANKS REPORTING TRUST EARNINGS, CLASSIFIED ACCORDING TO CAPITAL OF BANK *

	<i>Banks with Capital of \$25,000 to \$50,000</i>	<i>Banks with Capital of \$50,000 to \$100,000</i>	<i>Banks with Capital of \$100,000 to \$200,000</i>	<i>Banks with Capital of \$200,000 to \$500,000</i>	<i>Banks with Capital over \$500,000</i>	
Number of banks administering trusts	18	76	245	463	437	339
Average gross earnings per trust for year ended June 30, 1935	\$71	\$86	\$53	\$50	\$72	\$237
Average gross earnings per trust department for year ending June 30, 1935	193	686	899	1,898	4,284	73,616

* *Annual Report of the Comptroller of the Currency, 1935, p. 17.*

Fees. The fees charged for the various trust services are not uniform. In the case of living trusts the fees are set by the trust agreement. In the case of trusts originating through the appointment of the court and being operated under its supervision, the fees are either fixed by precedent, determined by the court, or regulated by statute. With the purpose of introducing some degree of uniformity into the charges made for fiduciary services, the Trust Divi-

TABLE XXXIV

RATIO OF GROSS EARNINGS OF TRUST DEPARTMENTS TO TOTAL GROSS EARNINGS OF NATIONAL BANKS CLASSIFIED ACCORDING TO DEPOSITS*
(For Six Months Ended June 30, 1935)

<i>Banks with Deposits of</i>	<i>Per Cent of Earnings of Trust Depart- ment to Total Earnings</i>	<i>Banks with Deposits of</i>	<i>Per Cent of Earnings of Trust Depart- ment to Total Earnings</i>
\$100,000 and under	\$1,000,000 to 2,000,000	. . . 81
100,000 to 250,000	048	2,000,000 to 5,000,000	. . . 1 41
250,000 to 500,000	06	5,000,000 to 50,000,000	. . . 3 13
500,000 to 750,000	24	50,000,000 and over	. . . 5 02
750,000 to 1,000,000	35		

* Computed from data appearing in the *Annual Report of the Comptroller of the Currency*, 1935, p. 675. These percentages are colored by the fact that a great many of the smaller national banks have no trust departments, and therefore the profitability of such departments of particular banks is not so slight as figures indicate.

sion of the American Bankers Association has issued a suggested schedule of fees based upon a study of the costs of operating trust departments.¹³ It is unnecessary to reproduce here a full account of suggested schedules, but the following will convey some idea of the general nature of charges made by trust companies for their services.

For acting as executor, administrator, trustee under will, guardian, or trustee under living trusts, the fee should be computed on the basis of all funds, both principal and in-

¹³ *Guide to Trust Fees with Recommended Cost Accounting System*, Revised, 1936

come, passing through the trust company's hands, at the following rates:¹⁴

5%	on the first	\$100,000
2½%	on the next	\$900,000
2%	on all over	\$1,000,000

An alternative suggestion for trustees under will and under living trusts is an annual fee computed on the value of the trust property at the rate of

6%	on the first	\$100,000
3%	on the next	\$900,000
2%	on all over	\$1,000,000

with a closing fee of 3 per cent if the trust is terminated within one year, and a fee of 1 25 per cent if terminated after ten years

For life insurance trusts the suggested fee is based upon the principal and income that pass through the trust company's hands, computed at the following rates:

5%	on the first	\$100,000
2½%	on the next	\$900,000
2%	on all over	\$1,000,000

While acting as safekeeping agent or custodian, the trust company receives securities and mortgages for which it issues receipts; collects income and maturing principal; notifies depositors of calls, subscription rights, defaults, and the formation of protective committees; buys, sells, receives, and delivers securities on specific directions, and renders regular statements to the depositors. For these services the suggested charges are:

Minimum fee of \$25 per annum
\$100 per annum per \$1,000 face value of bonds up to \$1,000,000 face value
\$75 per annum per \$1,000 face value of bonds on the next \$1,000,000
\$50 per annum per \$1,000 on all bonds over \$2,000,000
\$05 per share of stock per annum on the first 20,000 shares
\$03½ per share of stock per annum on the next 20,000 shares
\$02½ per share of stock per annum on the next 20,000 shares
\$100 per annum for each \$1,000 face value of mortgages

¹⁴Quoted with the permission of the Trust Division of the American Bankers Association

For a trustee under corporate bond or note issue, an initial fee of at least \$100 is suggested, with annual fees from \$100 to \$150 for issues of not over \$1,000,000, up to \$500 on issues up to \$10,000,000. For certification of bonds a flat charge is suggested for the first \$1,000,000, as follows.

\$3 00 for each	\$10,000 bond
\$1 50 for each	\$5,000 bond
\$1 00 for each	\$1,000 bond
\$ 60 for each	\$500 bond
\$ 40 for each	\$100 bond

For a transfer agent of stock the suggested charge is \$250 per annum for the issuance of 250 certificates and the maintenance of 250 accounts (or less), plus \$ 30 to \$ 50 for the issuance of each certificate in excess of 250, and \$.50 for the maintenance of each account in excess of 250

CHAPTER XXIII

CONCENTRATION IN BANKING CONTROL

Large-Scale Banking

Paralleling the growth of large-scale business enterprise is the development of large-scale banking. In part, this development has been the natural result of the expansion of individual banks as they have shared in the industrial and commercial development of growing cities; in part, it has been the result of combinations effected sometimes to satisfy the desire for power, sometimes to combat actual or threatened failure. To no small degree it has come from attempts to realize the real and fancied advantages of size. Some clue to the nature of the advantages of large-size banks can be obtained from a study of Tables XXXV and XXXVI. The data in the former table are especially significant since they are for banks of different sizes in cities of nearly the same size.

Some mergers and consolidations of national banks have taken place throughout their history, but the passage of a law effective November 7, 1918, facilitating consolidation, gave impetus to the movement. Table XXXVII shows its rapid development, while an idea of the change in the size of national banks in the period of most rapid consolidation may be seen from Table XXXVIII (see pages 396, 397).

Affiliated banks and corporations. From about 1900 to 1927, there was a marked trend toward affiliating state savings banks and trust companies with national banks. The stockholders of national banks looked with envy upon

TABLE XXXV

EARNINGS AND EXPENSES OF MEMBER BANKS IN THE CHICAGO FEDERAL RESERVE DISTRICT, BANKS IN CENTERS OF 5,000 TO 15,000 POPULATION, DECEMBER 31, 1927, TO DECEMBER 31, 1928 *

Description of Ratios	Less than \$500,000	MEMBER BANKS WITH EARNING ASSETS OF						Over \$3,000,000
		\$500,000 to \$750,000	\$750,000 to \$1,000,000	\$1,000,000 to \$1,500,000	\$1,500,000 to \$2,000,000	\$2,000,000 to \$2,500,000	\$2,500,000 to \$3,000,000	
Percentage of the following to average earning assets:								
Interest and discount received	7.15%	5.87%	6.61%	5.95%	5.79%	5.77%	5.99%	
All other earnings	1.05	51	52	54	60	69	61	
Gross earnings	8.20	6.38	6.53	6.49	6.39	6.47	6.60	
Interest paid on deposits	2.61	1.67	2.17	2.18	2.23	2.42	2.65	
Interest and discount on borrowed money	.10	17	09	11	05	09	05	
Solaries and wages	1.95	1.69	1.56	1.44	1.35	1.26	1.29	
Taxes	43	54	41	42	36	33	29	
All other expenses	1.20	88	79	80	69	63	65	
Total expenses	6.29	4.96	5.03	4.95	4.68	4.73	4.94	
Net earnings	1.91	1.42	1.50	1.54	1.71	1.74	1.66	
Net losses	60	56	71	1.12	1.02	49	32	
Net additions to profits	1.31	87	80	42	69	1.26	1.34	

Percentage of the following to average capital funds

Average earning assets	507.40	560.73	616.45	652.92	690.55	783.81	843.22
Net earnings	9.68	7.98	9.27	10.04	11.80	13.66	13.98
Net additions to profits	6.66	4.86	4.92	2.74	4.73	9.84	11.31

* Data taken from "Branch, Chain, and Group Banking," Hearings before the Committee on Banking and Currency, House of Representatives, 71st Cong., 2d sess., H. Res. 141, p. 628.

Percentage ratio to capital,
surplus, and undivided
profits of:

1. Average earning assets	329.91	416.16	420.86	451.04	471.68	531.83	524.07	591.50	581.38	638.15
2. Net additions to profits	1.31	1.48	2.36	2.36	4.33	5.91	5.25	7.34	7.14	7.30
Percentage ratio to total gross earnings of										
1. Salaries and wages	28.29	23.79	22.02	21.54	20.92	22.04	21.99	21.15	20.06	19.19
2. Interest pd. on deposits	27.28	33.71	34.46	36.01	36.27	32.69	31.76	33.64	34.90	35.24
3. Net losses	12.80	14.91	14.19	13.61	8.90	8.16	9.44	6.40	7.20	7.78
Percentage ratio to average gross deposits of average time deposits	41.89	51.02	52.15	53.23	53.41	53.69	48.44	48.76	41.17	29.00

Percentage ratio of net earnings to average capital, surplus, and undivided profits

4.33	5.82	6.32	6.35	7.06	8.77	8.45	9.79	10.04	10.30
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* Data taken from a *Preliminary Study of Member Bank Operations and Earnings*, Seventh Reserve District, prepared by the Division of Research and Statistics, Federal Reserve Bank of Chicago.

TABLE XXXVII

NUMBER AND CAPITAL OF NATIONAL BANKS INVOLVED IN CONSOLIDATIONS*

<i>Year</i>	<i>Number of Banks</i>	<i>Capital</i>
1918	16	\$ 5,555,000
1919	48	29,150,000
1920	30	30,365,000
1921	48	52,994,000
1922	42	46,750,000
1923	38	29,150,000
1924	32	12,760,000
1925	30	32,820,000
1926	60	128,430,000
1927†	81	59,200,000
1928	101	181,000,000
1929	161	488,300,000
1930	172	364,600,000
1931	99	91,300,000
1932	74	64,000,000
1933	32	50,000,000
1934	24	27,400,000

* Figures are for consolidations only

† Figures for 1927 to 1933 include consolidations of national and state banks with national banks

the lucrative investment banking, real estate loan, and trust company and savings bank business from which they were excluded.¹ National banks, particularly in larger cities, organized state bank affiliates, whose stock was owned pro rata by the stockholders of the national banks and was trusteeed for their benefit. A transfer of shares of national bank stock often carried with it ownership of an appropriate amount of stock in the affiliated banks. These affiliated state banks ordinarily operated under the same roof and with the same officers as did the national banks. With the passage of the Federal Reserve Act, however, national banks were permitted to lower their reserves against time deposits so that they were able to compete for savings deposits. Further, the right to exercise trust functions was granted. In 1927 the power to

¹ National banks did some underwriting of state, county, and municipal issues only. Their high reserve requirements made it impossible to compete successfully with state banks for savings. After 1913 real estate loans were permitted to country banks to a limited extent.

TABLE XXXVIII

NUMBER AND DEPOSITS OF NATIONAL BANKS CLASSIFIED ACCORDING TO CAPITAL STOCK

(Deposits in Millions of Dollars)

<i>Classification of Capital Stock</i>	1925		1929		1933	
	<i>No of Banks</i>	<i>Deposits</i>	<i>No of Banks</i>	<i>Deposits</i>	<i>No of Banks</i>	<i>Deposits</i>
Less than \$50,000	2,425	\$ 794	2,050	\$ 695	1,244	\$ 307
\$50,000, but less than \$200,000	4,257	4,278	3,968	4,189	2,803	2,349
\$200,000, but less than \$500,000	890	3,051	900	3,025	703	1,916
\$500,000, but less than \$1,000,000	249	1,943	261	1,843	210	1,270
\$1,000,000, but less than \$5,000,000	205	5,056	192	4,156	161	3,566
\$5,000,000 and over	28	5,956	37	8,864	37	8,179

lend on real estate was increased, particularly for the banks in larger cities, and the right to buy and sell "investment securities" was definitely recognized. These legislative changes practically abolished the differences between the privileges of state and national charters, and in most cases state bank affiliates were merged with the national banks. The remarkable profits which such state bank affiliates produced for their stockholders are indicated by the comparison of the net earnings on invested capital of two banks in such an affiliation shown in Table XXXIX.

TABLE XXXIX

RATIO OF NET EARNINGS TO INVESTED CAPITAL*
(By Per Cents)

<i>Year</i>	<i>First National Bank of Chicago</i>	<i>First Trust and Savings Bank</i>
1905	73%	25 0%
1910	64	23 6
1912	83	14 7
1915	67	9 0
1920	12 4	14 9
1923	7 3	9 4
1924	7 6	10 7
1925	5 6	15 0
1926	9 8	12 4

* Compiled from newspaper reports of net earnings and from official published reports of capital surplus and undivided profits

In order to obtain profits from underwriting speculative securities, a privilege denied to state as well as to national banks, banks frequently organized nonbanking corporations or security companies which were affiliated with the banks through identical stock ownership. Such companies played an active part in security underwriting and marketing during the 1920's. The Banking Act of 1933, however, abolished security company affiliates for all banks of deposit. Banks also organize affiliated corporations to hold real estate in which the bank is housed and even other real property in no way directly concerned with the banking functions. Some have set up holding companies which in turn have acquired an amazing array of interests in addition to the stock of other banks. Some state-chartered banks have been permitted to own stock in other corporations, particularly for purposes of control. Thus we have had joint stock land bank and security company stock, as well as stock in companies owning bank buildings and safety deposit facilities, in the portfolios of some commercial banks.

Methods of Concentration of Control

The holding company. The holding company has been used by banks to serve two purposes. The first and by far the more laudable is that of unifying the management and control of several banks. The second and less desirable purpose is that of tying up nonbanking corporations with banks. A combination of these two uses has often appeared in which a group of banks and a number of nonbanking affiliates are tied together. The sponsors of holding companies prefer to call this type of combination *group banking*, reserving the title of *chain banking* for combinations tied together in other ways.

Bank holding companies become owners of a controlling interest in the shares of affiliated banks either through outright purchase or through an exchange of stock. The banks remain independent corporations, but their affairs are brought under the control of the holding company,

which elects the management. Frequently the holding company itself is affiliated through common stock ownership with a large city bank, whose officers dominate the policies of the group. Some picture of the holding company groups can be obtained from Table XL.

TABLE XL
PRINCIPAL HOLDING COMPANY GROUPS, 1929*

	Number of Banks	Loans and Investments (in thousands)
Northwest Bancorporation, Minneapolis	92	\$ 339,754
First Bank Stock Corp, Minneapolis	78	339,267
Guardian Detroit-Union group, Detroit	35	403,996
First Security Corp, Ogden, Utah	25	34,723
Old National Corp, Spokane, Wash	22	32,981
First National-Old Colony Corp, Boston	20	568,312
First National-Peoples Wayne Co, group, Detroit	21	705,032
Southwest Corp, Tulsa, Okla	21	77,753
Marine Midland Corp, Buffalo, N Y	19	425,436
Transamerica Corp, N Y.	18	1,418,361
First Wisconsin National Bank, Milwaukee	18	168,466
Anglo-National Corp, San Francisco	17	146,138
First Securities Corp, Syracuse, N. Y	14	115,559
First National Bank, Atlanta, Ga	7	104,954

* "Branch, Chain, and Group Banking." *Hearings before the Committee on Banking and Currency, House of Representatives, 71st Cong., 2d sess., H Res 141, p 455.*

Advantages claimed for holding company banking.
The sponsors of group banking claim that stockholders of banks which join a group enjoy definite advantages, such as the following:

1. The individual bank may participate in loans to large borrowers who would look elsewhere for accommodation if the group did not exist.

2. Working reserves can be concentrated in the hands of one city correspondent, normally a member of the group. Thus less idle funds will be required in the hands of city correspondents. The acting correspondent for the group stands ready to give aid when needed.

3. Affiliated companies engaging in trust business, se-

curity underwriting, and the like, enable stockholders in the holding company to participate in the profits from such activities which are otherwise denied to stockholders of smaller banks. Part of this argument is no longer valid because security company business must now be divorced from bank holding companies.

4. Operating economies may be expected from improvements in management. Supplies may be purchased in larger amounts. Advertising becomes more economical. The cost of insurance and bonding of employees can be reduced.

5. The stock of the holding company is often of more value than that of the operating bank, since it has greater diversification of risk behind it, is a larger issue commanding the interest of a wider market, and enjoys the higher earnings derived from the expected economies.

Objections to holding company banking. With intelligent and honest management, holding company banking may be decidedly more desirable than unit banking. There are, however, certain vital criticisms which can be made:

1. Examination of chains and groups is difficult since the banks may be spread over a wide area and may be under the control of several separate state authorities in addition to national bank examiners. Under such a situation juggling of funds and assets may be overlooked.

2. The banks may be mismanaged and exploited for the benefit of those in control. This danger was demonstrated in the case of certain failures during the banking crisis from 1932 to 1933. Banks lent heavily to officers to finance speculation in the stock of the holding company. Unit banks were compelled to pay unwarranted dividends in the face of operating losses to enable the holding company to maintain its dividend policies. Holding companies borrowed from the banks which they owned to finance speculative dealings. The subsidiaries of holding companies in one case included not merely banks but corporations owning office buildings, a chain of hotels, a coal mine, residential

and business properties, a produce market, and a security company

Branch banking. The contrast between holding company banking and branch banking lies in the fact that a branch system is one single bank incorporated under a single charter, answerable to a single supervisory authority, and all the branches of which are subject to direct central control. The branches are merely devices whereby it is possible to extend banking contacts into areas beyond the reach of the home office. Branch banking may, of course, be tied up with holding company control. In the United States branch banking exists only within the confines of individual states and to a large extent within single cities. On December 31, 1935, there were 798 banks operating branches (excluding mutual savings and private banks, of which 85 operated 136 branches). Of this number 182 were national, 143 were state member, and 473 were non-member banks. The total branches operated by these banks were 3,099 in number, of which the national banks operated 1,327, the state member banks 952, and the non-member banks 820. Of the total number of branches, 1,611 were located in the same city as the parent or head office, 606 were outside the home city but in the same county, while only 882 were located outside the county in which the head office was located.²

Advantages of branch banking. The advantages of branch banking may be enumerated as follows:

1. The larger banking unit resulting can better handle the requirements of the large customers.
2. The smaller communities enjoy the advantages of the service of more powerful and presumably sounder banks. The assets of the whole branch bank system are behind each branch, in contrast to the situation in group and chain banking, where no legal responsibility attaches to one part of the system for the other units in case of difficulty.

² *Federal Reserve Bulletin*, April, 1936, p. 304.

3. More convenient banking facilities are possible. The population per banking office is considerably greater in unit banking than in branch banking cities. Chicago and St. Louis, both unit banking cities, had, in 1929, 16,126 and 22,432 inhabitants per banking office, respectively, as compared with 7,764, 9,504, and 4,640, respectively, for the branch banking cities of San Francisco, Cleveland, and Detroit.

4. Branch banks can command better managerial skill. Branch managers can be carefully trained and supervised, with greater opportunity for promotion for those of most promise.

5. When branch bank operations extend over a wide geographical area, they resist the shock of depressions more successfully than do unit banks. This arises both from the greater opportunity for diversification of loan risk and from the industrial and geographical diversification of deposits so necessary if forced liquidation of loans and bank failure are to be avoided in areas suffering adverse trade balances during depression.

6. Branch banks increase the mobility of capital and make for greater uniformity of interest rates throughout the area served.

Objections to branch banking. The objections raised to branch banking naturally are voiced by the unit banker who visualizes himself swallowed up in a branch banking development. More particularly the objections are:

1. Branch bankers are likely to require collateral on all loans and refuse to lend on the character of the borrower, perhaps retarding local economic development. This is hardly valid since even a branch banker is interested in the business development of the locality of the bank. Moreover, a more careful loan policy than that of many unit banks is desirable.

2. Funds are withdrawn from rural areas and are placed in cities. In answer to this, it has been shown that Cana-

dian city borrowers complain that the reverse is true, with city funds transferred to rural districts in response to the higher interest rates there³

3. Too much red tape and delay arise from the lack of authority of managers and the necessity for referring loans to the main office. But it is estimated that over 95 per cent of the loans of Canadian branch banks are handled without delay by the branch managers and by the use of the telephone. Branch managers may lend up to a fixed limit or reject loans without reference to the main office.⁴

4. Managers are not properly sympathetic with local needs

5. Branch managers are shifted too frequently to be of the best service to the community served.

6. Too much concentration in the control of banking operations will arise. Further, mismanagement on a large scale can arise more easily with branch than with unit banking

The objections just mentioned are hardly sufficient to constitute a serious criticism of branch banking. Certain broader problems exist, however. Branch banks operating solely within the home city are hardly more than handy devices for attracting business to the parent. They offer only part of the genuinely important characteristics of branch banking. What, then, should be the territorial limits of branch banking? Should it be confined to trade areas, or should it be permitted to extend throughout the country? Should it be confined within individual states? The wider the area, the greater become the opportunities for diversification, but at the same time managerial and supervisory problems increase. If it be agreed that the present restrictions on branch banking should be relaxed, under what conditions should banks be permitted to organize branches? Obviously great care is required if pow-

³ Cartinhour, G. T., *Branch, Group, and Chain Banking*, 1931, Ch. XX

⁴ *Ibid.*

erful branch banks are not to be allowed to put unfair pressure upon unit banks. Excessive competition by branch banks with the unit banks might be quite as undesirable as between unit banks themselves. Finally, the supervision of large branch banking systems presents a problem. If the number of branches is large, it is impracticable to examine all at the same time. The head office may be required to furnish a consolidated balance sheet when examined, and the largest branches and the head office may be examined at the same time. Investments and open market loans are carried in the head office, leaving only local loan paper to be checked at the branches. The Comptroller of the Currency reported no difficulty in examining the Bank of Italy (California) with 287 branches⁵ In any event the problem of supervision is much simpler than that presented by chain and group banking.

Chain banking. A wide variety of interbanking relations falls under the general head of "chain banking." Control in such chains arises out of various degrees of common stock ownership, ranging all the way from identical ownership represented by trusteeing stock of one bank for the benefit of the stockholders of another, to the loose, informal control arising from interlocking directorates.

Chains of banks develop both in rural districts and in cities. Sometimes they arise from the purchase of stock in banks in other locations as a means of extending the banking power of some individual or group of individuals. Rarely are they the result of attempts to restrain competition. Frequently they arise from the efforts of large city banks to attach to themselves a collection of banking satellites. Often this has been accomplished when an officer in a large bank invests in the stock of a smaller one and

⁵ "Branch, Chain, and Group Banking," *Hearings before the Committee on Banking and Currency, House of Representatives, 71st Cong., 2d sess., H. Res. 141, pp. 133-134.* For a statement of the method used to examine the branch banking systems of the Twelfth Federal Reserve District, see pp. 134-140 of these *Hearings*.

assumes an important place on its board of directors. Smaller banks, themselves, are frequently interrelated by complex interlocking directorates and common officers.*

The benefits of chain banking are slight. As in the case of holding company control, gains may be had through concentration of reserves and uniform management, or operating economies may arise through the purchase of supplies and services. On the other hand, chain banks are especially susceptible to mismanagement and exploitation. The failures experienced by chains of banks have been so numerous that sponsors of the modern holding company plan insist upon differentiating their type as "group banking," in contrast with "chain banking."

Relation of branch to group and chain banking. Group and chain banking have been particularly stimulated by restrictions on branch banking. This has been apparent in the Middle West, where branch banking has been generally prohibited or severely limited. But even in states where branch banking has been permitted, holding company control has been instituted to tie branch banks to one another.

Legal status of branch banking. The law now permits national banks to establish branches in states where branch banking is expressly permitted. The following restrictions apply, however:

1. National banks are subject to the same territorial limits as are the state banks. Wherever state banks are limited to city- or county-wide branches, national banks are similarly limited.
2. Approval of the Comptroller of the Currency must be obtained.
3. Capital required of a national bank authorized to establish branches outside the home city is \$500,000, unless the bank is located in a state having a total population less than 500,000, and having no city with a population exceeding 50,000. The minimum capital is then \$100,000.

*For a picture of chain and group banking as of 1929, see *Hearings, op cit*, pp 162-184

If located in a state with a population of from 500,000 to 1,000,000, having no city with a population exceeding 100,000, the minimum capital is \$250,000. The aggregate capital of a branch bank shall equal at least the aggregate minimum required capital for setting up a unit bank at the location of each banking office

4. Seasonal agencies may be established in resort communities within the county in which the main office is located, without incurring any capital requirements, if the place is not served by any other bank.

State banks may join the Federal Reserve System and bring with them all branches legally in operation on February 25, 1927, but they must divest themselves of all branches established after that date outside the home city. Under the amendment of 1933, they may now establish new branches in the same manner and under the same terms as those just described for national banks, except that permission must be obtained from the Board of Governors. Insured nonmember banks may not establish or move a branch without the consent of the Federal Deposit Insurance Corporation.

In 1936 eighteen states (counting the District of Columbia) specifically permitted state-wide branch banking, seventeen specifically permitted limited-area branch banking, nine states prohibited branches, and five had no law dealing with the subject.⁷ In all states banks wishing to establish branches must obtain the permission of supervisory authorities. In general, branches outside the home city may be established where there is no existing bank, or,

⁷ *Federal Reserve Bulletin*, November, 1936, p. 858. States permitting state-wide branch banking are Arizona, California, Connecticut, District of Columbia, Idaho, Maine, Maryland, Michigan, Nevada, North Carolina, Oregon, Rhode Island, South Carolina, South Dakota, Utah, Vermont, Virginia, and Washington. States permitting limited-area branch banking are Alabama, Arkansas, Delaware, Georgia, Indiana, Iowa, Louisiana, Massachusetts, Mississippi, Montana, New Jersey, New Mexico, New York, Ohio, Pennsylvania, Tennessee, and Wisconsin. Those prohibiting branch banking are Colorado, Florida, Illinois, Kansas, Minnesota, Missouri, Nebraska, Texas, and West Virginia.

if other banks operate in the same community, upon the purchase of an existing bank, or by obtaining the consent of the other banks.

Under existing legislation there is no possibility of the establishment of anything like a broad system of branch banking in the United States. Only an extension to national banks of the right to engage in interstate branch banking seems likely to accomplish this. Yet the distinct superiority of branch over chain and holding company banking, which often acquire an interstate character, makes such legislation highly desirable.

Legal control of holding company banking. Attempts to control holding company banking were introduced in the banking acts of 1933 and 1935. In order for holding companies to be able to vote the shares of stock owned by them in national and state member banks, a *voting permit* must be obtained from the Board of Governors of the Federal Reserve System. The Board may grant or withhold the permit in view of the financial condition and character of the management of the holding company. Specifically, as a price for a permit, the holding company must agree: (1) to submit to examination at the time affiliated banks are examined; (2) to permit examination of each bank owned or controlled by the holding company; and (3) to publish individual and consolidated statements of all affiliated banks as required. Further, the holding company is required to set aside as a reserve fund all net earnings above 6 per cent per year on the book value of its own shares. After June 16, 1938, this fund must equal 12 per cent of the aggregate par value of all bank stock controlled by the holding company. Except in cases where the stockholders of the holding company are individually liable for statutory liability of the company because of its ownership of bank stock, or where the bank stock held has no double liability feature, the reserve fund must be increased annually by at least 2 per cent of the par value of the bank stock held until it amounts to 25 per cent of the aggregate

par value of such bank stock. As a further requirement for obtaining a voting permit, the holding company must show that it has no interest in any company engaged in security underwriting or distribution, or that any such interest will be relinquished within five years of the date of filing application for the voting permit. Finally, it must agree to pay dividends only out of actual net earnings.

If a holding company fails to obtain a voting permit, the banks whose stock it controls may not: (1) receive deposits of government funds; and (2) pay dividends to the holding company. In addition, state member banks must furnish the Board of Governors with reports from each non-member bank affiliate at least three times per year. Such affiliates are also subject to examination under the direction of the Board of Governors.

Separation of security companies from member banks. Security company affiliates of commercial banks were severely criticized for their activities preceding the stock market crash of 1929. They borrowed at the affiliated bank to obtain funds to carry speculative securities. Their close tie-up with the bank was a temptation to load the portfolios of the banks with unsalable securities, to sell securities to the trust department for investment of trust funds, and to give biased investment advice to customers.

The act of 1933 required all member banks to sever their relations with security companies within one year. Further, it made it unlawful for any firm engaged in the business of issuing, underwriting, or distributing securities to receive deposits. This expressly does not apply to banks dealing in securities as permitted by law. As later amended, the law now prohibits interlocking officers, employees, or directors between member banks and security companies, except in limited cases where the Board of Governors grants a permit in the belief that the bank's investment policies and advice to customers will not be unduly influenced.

Separation of bank stock from stock of other corporations. Effective August 23, 1935, certificates of stock of member banks may not bear any statement representing the stock of any other corporation except that of another member bank or a corporation holding the bank premises on June 16, 1934. Further, the sale of stock in member banks cannot be conditioned upon the sale or ownership of stock in corporations other than member banks and those holding bank premises. This does not, however, prohibit the sale of stock of other corporations on the condition of ownership or sale of stock in member banks.

Regulation of interlocking directorates. The Clayton Act provides that no private banker, director, officer, or employee of any member bank shall at the same time be a director, officer, or employee of any other bank, state or national, except that: (1) the Board of Governors may grant a permit in the case of one other bank; and (2) restrictions do not apply to banks 90 per cent of whose stock is owned by the United States, banks in liquidation, foreign banking corporations, banks 50 per cent of whose stock is owned by the stockholders of another member bank, banks not located in the same town or city (or a contiguous one), and banks not engaged in the same class of business. This regulation, while not affecting interlocking directorates between nonmember banks, would seem to prevent interlocking directorates involving member banks of the same city unless the banks concerned are controlled by the same stockholders. This will prevent many such chains as have heretofore appeared in the larger cities.

CHAPTER XXIV

BANK FAILURES

An unprecedented number of bank failures occurred in the United States during the period from 1921 to 1933. The agricultural depression, which began with the general business collapse of 1920 to 1921, continued with varying degrees of intensity down to 1929 and took a heavy toll in bank failures in agricultural areas. During the years 1921 to 1929, over 5,600 banks failed with deposits of more than \$1,700,000,000. The prolonged and acute depression which began late in 1929 brought a still greater flood of failures, this time in the industrial centers as well as in the agricultural districts. Between January 1, 1930, and March 15, 1933, 5,492 banks suspended with deposits of \$3,500,000,000. By the end of March, 1933, 5,200 banks, operating before the crisis, with deposits of over \$4,000,000,000, had not been licensed to reopen. This meant the suspension of over 16,000 banks with deposits of over \$9,000,000,000 between 1921 and the end of March, 1933, not counting temporary suspensions arising directly from the bank holidays.

The banking holiday. The bank failure situation became serious in 1930 when 1,345 banks with deposits of \$864,000,000 suspended. Conditions became rapidly worse in 1931 with 2,298 failures, involving \$1,691,000,000 in deposits. The banks themselves attempted to meet the difficulties by setting up, in October, 1931, the National Credit Corporation, authorized to issue up to \$1,000,000,000 in debentures which were to be sold to banks. The proceeds were to be lent to hard-pressed banks attempting to liqui-

date their assets in the face of runs started by such wholesale failures. It was hoped that this procedure would stem the tide for the solvent banks. The National Credit Corporation proved ineffective, however, although the number of failures declined from 522 in October to 175 in November, 1931.

On January 22, 1932, Congress passed an act authorizing the organization of the Reconstruction Finance Corporation, a government corporation with power to issue debentures which were sold to the Treasury, and to lend funds to distressed financial institutions, railroads, and farmers. Between February 29, 1932, when it started operations, and December 31 of that year, the RFC advanced \$4,450,000,000 to banks and trust companies. Failures declined to 121 in February and to 46 in March. Although rising to 131 in June, they declined to 67 in September. In spite of aid granted by the RFC, 242 banks failed in January and 154 in February, 1933. Weak spots in the banking system were developing rapidly as banks were subjected to increased pressure from depositors. The attempts of banks to reduce loans and to get cash put more pressure on prices and business as goods were liquidated to pay loans. The selling of securities demoralized the bond market and increased the difficulties of the banks.

The situation of the banks in Michigan became so hazardous that a holiday was declared by the governor on February 14. The closing of the Michigan banks put heavy pressure upon the banks in the surrounding territory as corporations and others sought to obtain funds by withdrawing deposits in unrestricted banks. Indiana declared a holiday on February 23, closely followed by Maryland, Arkansas, and Ohio. The holidays spread until all banking operations were virtually suspended throughout the country by March 4.¹ On Monday, March 6, 1933, the President closed all the banks by proclamation under the powers of a

¹ "Federal Reserve Bank of New York," *Monthly Review*, April, 1933.

war-time act of October 6, 1917, which authorized the President to regulate transactions in foreign exchange and the export or hoarding of gold or silver coin or bullion.

The presidential proclamation declaring a general bank holiday became necessary in order to put a stop to bank runs and the accompanying hoarding of cash. Only by a complete suspension could the banking situation be put into shape so that public confidence might be reestablished. The holiday caused an almost complete suspension of business activity as the means of payment were shut off. The proclamation originally fixed March 9 as the last day of the holiday, but the time was afterward extended. Not only was the holiday necessary if order was to be restored for member and nonmember banks, but it also served the very useful purpose of relieving a rapidly growing strain on the reserve banks. Member banks increased their rediscounts during the latter part of February and the first week in March by \$1,170,000,000, while the reserve banks bought \$460,000,000 in bills and securities in the open market. Between February 1 and March 4, \$305,000,000 in gold was exported, while gold in circulation (hoarded) increased \$150,000,000 during the same period. As a result the reserves of the reserve banks in excess of the statutory requirement declined from \$1,476,000,000 to \$416,000,000, and the average reserve ratio for the twelve banks fell from 65.6 per cent to 45.3 per cent.

On March 9, 1933, Congress enacted an Emergency Banking Act which (1) approved and confirmed the action of the President; (2) authorized the President during any period of national emergency to regulate or prohibit foreign exchange transactions, to prohibit export or hoarding of gold and silver coin, bullion, or currency; (3) authorized the Secretary of the Treasury to call in all gold coin, bullion, or certificates when in his discretion it is necessary to protect the currency; (4) authorized the appointment of a conservator for national banks in difficulties, pending final disposition of their affairs by return to full legal status or

liquidation (a certain fractional part of the deposits of banks in the hands of conservators might be classified as withdrawable and a portion restricted at the discretion of the Comptroller of the Currency while new deposits were to be segregated and held in cash or invested in government securities and payable on demand without restriction); (5) set up rules for the reorganization of national banks; (6) authorized national banks to issue 6 per cent cumulative preferred stock free from liability for assessment and with preference as to assets in case of liquidation and with such voting power as is approved by the Comptroller; (7) authorized the Secretary of the Treasury to request the Reconstruction Finance Corporation to buy or lend on preferred stock of any bank in need of capital funds; (8) authorized the issue of emergency currency in the form of Federal reserve bank notes; and (9) permitted member banks to obtain emergency aid by borrowing on their notes secured by noneligible paper (nonmember banks were given the privilege of borrowing at the reserve banks for one year by an act passed March 24, 1933).

On March 10 the President issued an executive order authorizing the Secretary of the Treasury to approve of the issuance of licenses to member banks making application to the reserve banks. It further authorized state authorities to permit the reopening of nonmember banks. On March 13, 14, and 15 the Secretary of the Treasury gave licenses to reopen member banks certified as sound by the Comptroller. State authorities did likewise. Banks certified as sound seem to have been those in possession of sufficient assets to enable them to obtain loans at the reserve banks to pay off all depositors if necessary. The Secretary of the Treasury issued a statement in respect to the new banking act to the effect that: "This legislation makes possible the opening of banks upon a sound basis, backed by an adequate supply of currency. Through this law the banks which will open will be placed in a position to meet all demands." The restoration of a genuine stockholders'

equity in the reopened banks was postponed until a later date. By March 29, 12,800 out of 18,000 banks operating before the holiday had reopened. This included member banks carrying approximately 90 per cent of the total member bank deposits. Reopened banks were not permitted to pay out gold or gold certificates, nor were they allowed to pay out currency for hoarding. Immediately a rapid return flow of currency to the banks set in which amounted to \$1,185,000,000 by March 29. Public confidence was restored and the emergency was past.

Causes of Bank Failures

The seriousness of American bank failures has stimulated much interest in possible remedies. Such remedies must necessarily be developed in the light of basic causes of failure. In Table XLI some of the more general causes of failures among national banks can be seen.²

After 1872 it appears that the most frequently occurring causes of failure during periods free from acute or prolonged depression are wholly or partially found in dishonest and illegal banking practices (Group 2). During periods of serious depression such causes become relatively less important. The unusually low figures for the causes appearing in Group 2 after 1923 are partially due to a change in classification which excludes violation of banking laws. The importance of fraud and violation of banking laws as causes of bank failures is especially pronounced between 1890 and 1922. It is quite natural to find depression in business and depreciation of assets, for reasons other than fraud and violation of banking laws, relatively unimportant during years of prosperity.

If one combines poor management with fraud and violation of banking laws into one general class of "internal causes" and contrasts the magnitude of the internal causes

² The following discussion and tables are to a large extent taken from an article by the writer in the *Journal of Business*, July, 1935, on "Bank Failures, Causes and Remedies."

TABLE XLI

CAUSES OF FAILURE OF NATIONAL BANKS †

Ratio of Number of Occurrences of Each Cause to the Total Occurrences of All Causes (in Approximate Percentages)

Years	<i>Fraud and Violation</i>		<i>All Internal Causes Depreciation and Depression</i>	
	<i>Poor Management of Law (1)</i>	<i>(2)</i>	<i>(1) and (2) of Assets</i>	
1865-1872	47%	32%	79%	20%
1873-1879*	26	23	49	50
1880-1889	21	41	62	37
1890-1900*	31	29	60	38
1901-1905	21	48	69	30
1906-1908	25	48	73	26
1909-1913	20	55	75	25
1914-1920	25	63	88	12
1921-1922†	23	18	41	58
1923-1929‡				
West of Mississippi River*	31	9	40	60
East of Mississippi River, mainly in agricultural South	32	26	58	41
1930-1931*	51	1	52	47

* The starred periods contain years of severe depression. These periods show a sharp decline in fraud and illegal practices as causes of failure.

† Computed from data given in the *Annual Reports of the Comptroller of the Currency*. The data apply to all national banks placed in the hands of a receiver.

‡ Beginning 1925 the comptroller's reports classify causes of failures only as (1) incompetent management, (2) fraud, and (3) depression. This results in a reduction of the size of Group 2 by putting violation of banking laws, excessive loans, etc., into the category of poor management.

of failure with that of the "external causes," consisting of depreciation of assets and depression, it becomes clear that the internal causes are the predominant ones in all save the depression periods. One may conclude, therefore, that a prevention of the operation of these internal causes, consisting of incompetent management, fraud, and violation of established banking law, would go far in abolishing bank failure even in bad times.

On the other hand, during the periods of the greatest number of failures—namely, periods of acute or prolonged depression—external causes become relatively important. This was particularly true of the failures in the area west

of the Mississippi River. There much distress was caused, between 1923 and 1929, by the extended depression in agriculture following the era of land speculation. Corrective measures, both legislative and administrative, necessitate a discovery of the underlying causes for fraudulent, weak, and inefficient management and for the susceptibility of banks to severe depression

Relation of size to failure. An examination of Table XLII shows that on an average in the whole country, banks of larger sizes fared better than the smaller ones, not only before 1930 when the depression was mainly confined to agriculture but during the 1930 to 1933 period as well. This fact has caused many to conclude that an important cause of failure is found in the smallness of banks.

TABLE XLII

NATIONAL BANK FAILURES CLASSIFIED ACCORDING TO CAPITAL STOCK

	1925 to 1929	Jan 1, 1930 to Oct 31, 1933
<i>Capital of less than \$200,000.</i>		
Total number of banks	6,491	5,414
Number of failures	424	985
Rate of failure (by per cent)	6.6%	18.2%
<i>Capital of \$200,000 to \$999,000.</i>		
Total number of banks	1,155	1,081
Number of failures	29	171
Rate of failure (by per cent)	2.5%	15.8%
<i>Capital of \$1,000,000 and over</i>		
Total number of banks	234	213
Number of failures	1	21
Rate of failure (by per cent)	.42%	10.0%

The rates of failure for banks of different size, however, are somewhat distorted by the fact that after 1929 the agricultural areas, which contained over two thirds of the banks with capital of less than \$200,000, were subjected to continued severe depression, more acute in fact than that suffered in the larger cities. A more accurate picture of the relation of size to failure may be had by computing the failure rate of banks of different sizes for each general geo-

graphical area. The results of such a computation for the period 1930 to 1933 are given in Table XLIII on page 418.

The rates of failure shown in Table XLIII exhibit remarkable variety. Among the national banks of New England, the failure rate grows steadily worse as banks grow in size. Among banks of the East, those in the group next to the smallest in size fared the best. Otherwise there is little difference. In the Pacific area the second from the largest group showed no failures, while the other three groups show little difference. The three great agricultural areas of the South, the Middle West, and the West show a marked difference between the failure rates for banks with a capital of \$1,000,000 and over and the smaller banks. Here is the reason for the favorable showing of the group of largest banks in the country-wide averages of Table XLII.

The banks with capital of over \$1,000,000 in the three agricultural areas consisted of the larger banks of the largest cities of those areas. Although dependent for their prosperity upon trade with the surrounding agricultural regions, these centers were essentially industrial and commercial in nature. The type of banking business available to such banks was not unlike that of the banks of similar size in the more highly industrialized areas. In fact, the failure rate for these banks in the South and Middle West is approximately the same as that for New England and the East. The excellent record of the large banks in the West is the only exception. One is forced to the conclusion that among the national banks, size has been a relatively unimportant factor in relation to the rate of failure. Even where the largest banks show some superiority, that superiority is due to the fact that they are being compared with small banks which were more exposed to the blows of depression. It is interesting to note that in a number of instances the larger banks show a distinctly less favorable failure rate than the smaller.

Additional evidence bearing on the relation of size to rate of failure is given in Table XLIV. Among Indiana banks

TABLE XLIII
FAILURES OF NATIONAL BANKS IN DIFFERENT AREAS CLASSIFIED ACCORDING TO CAPITAL STOCK, 1930-1933

	NEW ENGLAND			EAST			SOUTH			MIDDLE WEST			WEST			PACIFIC		
	Total Number of Banks*	Number of Failures	Rate of Failure (By Per Cents)	Total Number of Banks	Number of Failures	Rate of Failure (By Per Cents)	Total Number of Banks	Number of Failures	Rate of Failure (By Per Cents)	Total Number of Banks	Number of Failures	Rate of Failure (By Per Cents)	Total Number of Banks	Number of Failures	Rate of Failure (By Per Cents)	Total Number of Banks	Number of Failures	Rate of Failure (By Per Cents)
Capitalization Group																		
Less than \$200,000	242 5*	5	2 11	287 0	157	12 2	1,158 0	230 19	9 1	402 0	378	27 0	999 0	170	17 5350 7	56	16 0	
\$200,000 to \$499,000	79 7	3	3 8	290 0	20	6 9	154 0	38 24	7 1	201 5	58 28 8	63 7	63 7	4	6 3 50 7	8	15 8	
\$500,000 to \$999,000	23 0	1	4 3	79 0	9	11 4	44 7	16 35 8	6 3	63 2	15 23 7	9 5	9 5	1	10 5 20 5	0	0 0	
\$1,000,000 and over	18 5	2	10 8	55 5	5	9 1	54 5	5 9 2	43 2	43 2	5 11 6	14 2	14 2	0	0 0 18 2	3	16 5	

* Total number of banks is the average of the number operating at the beginning of each year 1930-1933

with a capitalization of less than \$100,000, the smaller banks were frequently superior to the larger

TABLE XLIV
INDIANA BANK FAILURES, 1925-1931*
(Classified by Size of Capital Stock)

<i>Capital Stock</i>	<i>Failures in Each Group in Percentage of Average Number of Active Banks in Each Group</i>
\$ 10,000- 19,999	19%
20,000- 29,999	26
30,000- 39,999	18
40,000- 49,999	22
50,000- 59,999	30
60,000- 69,999	33
70,000- 79,999	33
80,000- 89,999	50
90,000- 100,000	0
100,000- 199,999	18
200,000- 299,999	15
300,000- 399,999	28
400,000- 499,999	18
500,000 and over	12
Average for all groups	24

* Report of Study Commission for Indiana Financial Institutions, 1931, p. 56

Failure rate of national banks and others. The failure experience of national banks has been much less serious than that of the state and private banks. Likewise, Federal reserve member banks have made a better showing than the nonmember banks. The superiority of member banks over nonmembers can be ascribed to the character of the banks which are members rather than to the fact of membership itself. This is indicated by the fact that the bulk of the Federal reserve membership is made up of national banks and the state banks located in the larger financial centers, both of which have relatively low failure rates. The suspension rates of the different types of banks during the period 1926 to 1932 are presented in Table XLV.

To eliminate the possibility of distortion of the failure rate because of the nature of the geographical distribution of the different types of banks, a comparison is made, in

TABLE XLV

SUSPENSION RATE OF DIFFERENT CLASSES OF BANKS EXPRESSED IN PERCENTAGE OF FAILURES TO TOTAL BANKS IN EACH CLASS*

(As of December 31 of the Preceding Year)

Year	National	State and Private	State Member	All Members	Nonmember
1926	15%	4.1%	24%	16%	42%
1927	11	29	24	13	29
1928	7	23	12	8	24
1929	8	32	14	9	33
1930	21	68	23	21	71
1931	58	120	106	64	121
1932	43	86	62	45	86

* Compiled from data appearing in the *Federal Reserve Bulletin*, for the years 1930-1933

Table XLVI, for each geographical area. In each of the geographical areas the failure experience of the national banks was better than that of the state banks. In many instances it was distinctly better. Although in all areas the failure rates of state banks were worse than those of the national banks, they were especially unfavorable in New England, the West, and the Pacific areas.

The state bank record may be attributed to two main causes. First, state bank charters have been too easily obtained by irresponsible and inexperienced individuals. Further, they have been issued with little regard to the actual banking needs of the community to be served. For example, in numerous instances Indiana villages of less than five hundred inhabitants boasted of two or more banks.³ The second cause is lax supervision of banks, evident in many states because of inadequate banking laws and underpaid, overworked, and inefficient examiners.

The record of state and national bank failures shows a crying need for a unified banking system operating under Federal control. This would facilitate the prevention of overbanking resulting from lax and competitive chartering

³ Report of the Study Commission for Indiana Financial Institutions, 1931, p. 88.

TABLE XLVI

COMPARISON OF FAILURES OF NATIONAL BANKS WITH OTHER BANKS BY GEOGRAPHICAL DIVISIONS, JUNE, 1929 — MARCH 15, 1933
(Total Number of Banks Is the Average of the Number at the Beginning of Each Yearly Period Starting June 30)

Type of Bank	NEW ENGLAND			EAST			SOUTH			MIDDLE WEST			WEST			PACIFIC		
	Average Number of Banks	Number of Failures	Rate of Failure (By Per Cents)	Average Number of Banks	Number of Failures	Rate of Failure (By Per Cents)	Average Number of Banks	Number of Failures	Rate of Failure (By Per Cents)	Average Number of Banks	Number of Failures	Rate of Failure (By Per Cents)	Average Number of Banks	Number of Failures	Rate of Failure (By Per Cents)	Average Number of Banks	Number of Failures	Rate of Failure (By Per Cents)
National	869	9	2.4	1,751	127	7.2	1,472	238	16.2	1,787	287	16.0	1,081	119	10.9	459	53	11.5
Other banks	693	47	6.8	1,647	230	13.9	3,679	1,136	30.8	6,415	1,924	30.0	2,457	727	29.6	774	184	23.7

while bringing uniformity of regulation and control. The present makeshift arrangement arising from the Federal Deposit Insurance Corporation activities cannot go to the root of the problem.

Branch banking. It would be desirable to compare the failure experience of branch banks with that of unit banks operating under similar conditions. Unfortunately adequate data seem not to be available. However, on December 31, 1929, there were 822 branch banking systems with 3,547 branches reported as operating in the United States.⁴ During 1930 and 1931, 134 branch systems with 388 branches failed.⁵ Altogether, then, 134 branch systems out of a total of 822 operating at the beginning of the period failed during these two years, with a failure rate of 16.3 per cent. Putting it in another way, 522 out of a total of 4,369 banking offices operating under branch systems failed with a failure rate of 11.9 per cent. This may be compared with the failure rate for all national banks for the two years of 7.9 per cent, and for all state and private banks, of 18.8 per cent. This scanty evidence leads one to suspect that branch banking as practiced in the United States is on the average inferior to the unit national banking system and is about on the general level of the state banks. One may add that this is not a fair test of the efficiency of genuine branch banking. Of the 388 branches involved in failures, only 113 were located outside of the home city of the parent bank, while none was able to obtain the advantages of diversification which might arise out of interstate branch banking.

Stockholders' equity in banks as related to failure. It is natural to suspect that one contributing factor in bank failures is insufficient stockholders' equity. Table XLVII

⁴ "Branch, Chain, and Group Banking," *Hearings of the Committee on Banking and Currency*, House of Representatives, p. 459.

⁵ Willis, H. Parker, and Chapman, John M., *The Banking Situation*, p. 310, quoting from the unpublished report of the Federal Reserve Committee on branch, group, and chain banking.

contains a comparison of the ratio of stockholders' equity to deposits between national banks which failed during the first ten months of 1932 and all national banks. The comparison is as of December 1, 1930, which is sufficiently far ahead of the date of the failures involved to give a fair picture.

The evidence is not at all conclusive that, one year or more before failure, the failed banks had a stockholders' equity ratio inferior to that of the average bank. The difference in the two groups of smaller banks is so slight as to be of little significance, while the equity ratio of the group of largest banks was actually greater for the failed banks than for all banks. This, of course, does not mean that a satisfactory ratio of invested capital is not a necessary feature of sound banking. It does indicate, however, that it will not overcome the effects of bad management.

TABLE XLVII

RATIO OF STOCKHOLDERS' EQUITY TO DEPOSITS FOR NATIONAL BANKS WHICH FAILED JANUARY 1-OCTOBER 31, 1932, AND FOR ALL NATIONAL BANKS*

(As of December 1, 1930)

<i>Size of Banks Classified According to Capital Stock</i>	<i>Number of Failed Banks</i>	<i>Stockholders' Equity to Deposits— Failed Banks (By Per Cents)</i>	<i>Stockholders' Equity to Deposits— All Banks (By Per Cents)</i>
Under \$200,000 . . .	183	15 7%	17 5%
\$200,000-\$999,000 . .	52	14 6	16 9
\$1,000,000 and over	4	16 3	16 1

* Compiled from the Annual Reports of the Comptroller of the Currency.

Conclusion. The evidence presented here shows that faulty management rather than external circumstances is the major cause of bank failures. During prosperous times fraudulent and illegal banking practices loom large among the causes of failures. During periods of prolonged depression, weak and inefficient management unable to meet the rigorous requirements of the times contributes heavily to failures. It follows, therefore, that the most fruitful remedies for bank failure must be sought in improved man-

agement. There are, naturally, two general methods of approach to the problem of improving bad bank management. The first involves the use of direct pressure; the second, the altering of the institutional framework within which bankers must function. One form of direct pressure might well consist of a requirement that all bank executives should demonstrate their possession of a minimum amount of knowledge of sound banking principles and practice by passing some form of examination. Such a plan might give rise to a body of "certified bankers," who would assist in the promotion of a professional attitude among bankers in general. In addition to such measures, there must be retained and strengthened the existing methods of examination and control by public authority. The intelligent bank examiner and supervisor can very effectively improve the quality of bank management by insistence upon sound loan and investment policies, as well as by the detection of fraudulent and illegal practices.

A consideration of any alteration of the institutional framework surrounding banking activities confronts us with the question of what changes are desirable. Although it is commonly held that small banks are much more susceptible to failure than large banks, and therefore that large banking units are to be encouraged, the evidence indicates that the failure rate of large banks during the last few years is quite as great as that of small banks. An attempt to prevent failures by encouraging the development of banks of larger size cannot in itself be expected to be particularly beneficial. One benefit from such an attempt might arise from the fact that the increase in the size of banks in rural areas would necessitate the introduction of branch banking. If branch systems of the type capable of promoting diversification of loans and deposits resulted, there should be a definite gain in bank stability.

Another proposed improvement in the banking system takes the form of minimum requirements for the ratio of stockholders' equity to deposit liabilities. But the facts

indicate that such requirements would be of little consequence in preventing failures. The failed banks studied generally had a ratio of stockholders' equity to deposits as substantial as that of the surviving banks and in any event well above the commonly suggested minimum.

Although the failure experience of state banks was considerably worse than that of national banks, membership in the Federal Reserve System appears to have been of little benefit. When one takes into account the fact that most state member banks are located in areas less exposed to depression, their superiority over nonmember banks becomes unimportant in the light of their decided inferiority in comparison with national banks. Attempts to force all state banks into membership in the Federal Reserve System appear to be of little use in preventing failures. On the other hand very definite gains might be realized by the abolition of the dual system of chartering banks. This is true, first, because the state-chartered banks have been much more susceptible to failure than the national banks, and second, because the dual system has contributed to overexpansion of new banks during periods of prosperity. This has in turn tended to increase the number of inexperienced and incompetent bankers in the field and resulted in excessive competition leading to unwise banking practices. The effectiveness of public supervision could be greatly enhanced by a unified system of commercial banks under Federal control.

In both good and bad times defective bank management has all too frequently taken the form of excessive loans to the bank's own officers. This fact suggests two possibilities for improvement. First, the \$2,500 limit on loans by banks to their executive officers or to firms in which they are partners, as provided in the Banking Act of 1935, should be extended to include loans to all firms controlled in any substantial measure by such bank officers. This would definitely ban the doubtful practice of attempting an impartial appraisal of the banker's own credit standing and

should go far in reducing the abuses of excessive and fraudulent loans to insiders. Second, the temptation on the part of inside interests to engage in borrowing might well be reduced. An outright prohibition of all banking affiliates would be a wholesome change. This could be done with no harm to banking efficiency if branch banking barriers were abolished. Also, branch banking, in contrast with unit banking, furnishes a more adequate outlet for the energies and abilities of the capable banker and reduces somewhat the urge to develop outside business interests.

The possibilities of improvement in the management of banks seem greater under a sound branch banking system than under a unit banking system. However, the evidence indicates that branch banking as we have it in the United States has not on the average been equal to the average performance of the national banks which are predominantly of the unit form. Branch banking, to be of any serious consequence, must be allowed to develop over wider areas than those allowed at present.

Rehabilitation of Banks

The reopening of the banks after the holiday by no means completed the task. In many communities there were no banking facilities; in others the banks in operation had little sound capital or stockholders' equity; while in some places banking facilities were inadequate to serve local needs. Finally, there was the problem of salvaging as much as possible from the banks that had failed.

Sale of capital obligations to the RFC. To strengthen the capital structure of the reopened banks, they were encouraged to sell preferred stock to the RFC (capital notes or debentures were used where state law did not permit the issuance of preferred stock free from double liability). Such banks were first examined and were required to have a reasonable margin of owners' equity to protect the RFC's interest. Anticipated earnings were required to be sufficiently adequate to provide dividends or interest charges.

When funds were advanced against capital notes or debentures or loaned against the security of preferred stock, the banks were required to give assurance that the management and the salaries would be satisfactory to the RFC while it owned any of their obligations. In the case of default on two dividends on preferred stock or failure to amortize the principal on such stock at 5 per cent per annum, the preferred stock may take control of the bank. The banks are subject to examination by the RFC while it owns any of their obligations.⁶ The RFC originally required a return of 5 per cent on stock or notes purchased with a 1 per cent rebate if retired within three years. As of July 1, 1936, it reduced the rate to 3 per cent.⁷

The larger banks were urged to lead the way in the sale of obligations to the RFC and to encourage similar action by smaller banks, many of which needed more capital funds in order to qualify for deposit insurance. On November 30, 1935, the RFC owned \$879,348,000 of preferred stock, capital notes, and debentures. The volume of such holdings has been declining as the banks have gradually retired these obligations. Capital notes, debentures, and preferred stock may not be retired unless the capital funds comprise from $\frac{1}{10}$ to $\frac{1}{4}$ of the deposits.⁸

Rehabilitation of closed banks. In many instances it seems desirable to rehabilitate a closed bank, either because of the need for its services in the community or because it offers a better way of salvaging the assets for depositors. The general principle of such rehabilitation involves the establishing of adequate sound capital in excess of the bank's liabilities to depositors. This may be accomplished by the sale of a sufficient amount of new stock, by the assessment of old stockholders, by waivers of depositors to their claims, or by a combination of methods. Two gen-

⁶ Upham, Cyril B., and Lamke, Edwin, *Closed and Distressed Banks*, 1934, pp 191-193.

⁷ *New York Times*, July 13, 1936.

⁸ Upham and Lamke, *op cit*.

eral methods have been used in rehabilitating closed banks since the holiday.⁹

Under what is known as the "straight rehabilitation plan," the existing bank is reorganized by (1) writing off bad assets to the amount of the capital, surplus, and undivided profits, (2) a waiver of the depositors' claims by an amount necessary to bring the volume of deposits not waived down to equality with the sound assets, (3) the surrender of old shares by stockholders and a resale of these shares to them as a source of new capital funds; and (4) the sale of preferred stock to the public and to the RFC if necessary. Since the waiver of depositor claims has rendered the bank solvent, no claim for double liability can be exercised against the stockholders. The poor assets are set aside, and anything realized from them is applied to the waived deposits. Such an arrangement may be brought about, in the case of national banks, by the written agreement of persons holding two thirds of the stock and 75 per cent of the unsecured deposits (or other liabilities), provided consent is given by the Comptroller. Depositors and stockholders who do not consent to the agreement are also bound. Upon the reopening of the bank, the unwaived portion of deposits is made available without restriction.

The second method used is known as "waiver and sale." Under it the depositors are called upon to waive their claims in excess of the amount that can be realized from a sale of the sound assets to another bank newly created. The newly organized bank purchases the sound assets and assumes the unwaived liabilities of the old bank. The unacceptable assets are transferred to a trustee, who liquidates them and applies the proceeds to payment of the waived claims. The amount available may sometimes be increased by means of a loan from the RFC against assets not sold to the new bank.

Liquidation in the absence of reorganization. A failed

⁹ *Ibid*, pp 125-134.

bank which cannot be reorganized is put into the hands of a receiver with authority to liquidate the assets and pay the proved claims. The appointment of the receiver has often proved to be a problem. Two principal methods have been used. Previous to the existence of the FDIC, the Comptroller of the Currency appointed the receiver for national banks, and the liquidation was carried on under the supervision of the experts in charge of the division of insolvent banks. Now the FDIC automatically becomes receiver for any failed national bank. Receivers for state banks were generally appointed by local courts and were answerable only to them. The more modern method of handling state bank liquidations is that used in Indiana, where the Department of Financial Institutions takes possession of a closed bank and its agents carry out the process of liquidation. The acts of this department, however, are subject to the approval of a court of competent jurisdiction.

The appointment of liquidating agents or receivers by the Comptroller of the Currency, by state authorities, or by local courts has been criticized on the grounds that jobs have been given on the basis of political considerations or for motives not in harmony with the best interests of the bank and the public. Liquidations are, at best, costly and wasteful. Claims against debtors are compromised when they might have been collected in full by the officers of a going bank; expenses for legal services are high. This explains in part the superior advantages of rehabilitation of a bank over a receivership even at the expense of giving up the right to enforce double liability on the stockholders. In spite of problems which arise from having agents of a central authority liquidate a bank instead of local persons, centralization of liquidation is a very definite advantage, since costs can be reduced and more experienced agents employed.

CHAPTER XXV

MONEY MARKET MIDDLEMEN

In an intermediary position between the borrowers and the banks which furnish the funds are frequently found specialized middlemen. These middlemen fall naturally into two classes: those who assume an obligation on their own part and in some way guarantee the credit of the borrower, and those who merely act as brokers or dealers without guaranteeing the borrower's credit. In the first class are (1) stock market brokers, (2) finance companies, and (3) bill brokers (at times). In the second class are (1) the commercial paper houses, (2) dealers in treasury bills, and (3) bill brokers. This classification is not all-inclusive, for there are factors, agricultural credit agencies, and merchants extending trade credit who are doing substantially the same thing.

Stock Market Brokers

Brokers borrow to re-lend. Although speculators who deal through stock market brokers may buy securities outright with their own funds, they commonly prefer to buy on a margin. Dealing on a margin consists of investing a sufficient amount of one's own funds to absorb any probable losses arising from a decline in security prices, and borrowing from a broker the remainder needed to make up the purchase price. The broker uses the securities so purchased as collateral for bank loans. He is therefore a middleman, standing between the lending bank and the speculator. A bank which makes brokers' loans benefits

from a concentration of its security loans in the hands of a few borrowers and from the credit of the brokerage firm, which is a partnership subject to unlimited liability and regulated by the Stock Exchange.

Method of making brokers' loans. Brokers file a continuous loan agreement with the banks from which they expect to borrow, stating the terms to which any loans will be subject. Call loans (subject to call on twenty-four hours' notice) may be made by direct agreement with the broker's own bank or through the money desk at the Stock Exchange. Loans made directly by the broker's bank are the last to be called when the lending bank wishes to reduce brokers' loans.

On the New York Stock Exchange, banks with funds to lend notify the clerk of the money desk. Brokers wishing funds apply at the desk, and the clerk, under the direction of the Executive Committee of the Stock Exchange Clearing Corporation, fixes the call loan rate most likely to equalize the supply and demand for funds. If the supply fails to satisfy the demand at the rate fixed, the rate will be advanced. Time loans between banks and noncustomers are arranged by money brokers, who charge a commission of about $\frac{1}{32}$ of 1 per cent of the amount of the loan.¹ Only on the New York Stock Exchange is there a genuine call loan market, since here only do banks make call loans to noncustomer borrowers. Even on the New York Curb Market the money desk appears to be unimportant. Demand loans made by banks in other cities to their own customers are not in fact considered subject to call. Such banks, when desiring to make genuine call loans, place them in New York City. In 1929 about one half of the brokers' demand loans in that city were made through the money desk and hence were subject to quick call.²

Brokers' loans for others. Before 1933 banks in New

¹ Beekhart, Benjamin H., *The New York Money Market*, Vol. III, pp. 44-45, 49.

² *Ibid*, pp. 47, 53.

York City not only lent to brokers on their own account and for country correspondents but also made loans for private individuals, firms, and corporations. Under the Securities Exchange Act of 1934, brokers dealing on registered security exchanges may borrow only from banks that are Federal reserve members or banks that are subject to the same regulations as members. Borrowing from "others" is therefore made impossible for trading in important speculative securities. This restriction was instituted because of the trouble experienced in 1928 and 1929, when attempts to restrict credit going into the stock market were largely thwarted by the large volume of loans by "others" outside the control of the Federal reserve authorities. Even before the practice was made illegal the New York Clearing House Association had ceased to allow its members to make brokers' loans for any persons or firms other than banks. The Banking Act of 1933 prohibits member banks from making security loans for non-banking customers.

Relation of the customer to the broker. The broker undertakes to purchase stock for the customer upon the deposit of a satisfactory cash margin. He reserves the right to hypothecate the securities as collateral for bank loans. The customer agrees to the sale of the securities at any time and without notice in case the broker is not satisfied as to the adequacy of the margin, or in case the broker's demand for payment of the loan is not immediately complied with. The customer pays interest on his debt at a rate related to the cost of money to the broker. Section 7 of the Securities Exchange Act requires the Board of Governors of the Federal Reserve System to issue regulations with respect to loans on registered, nonexempted securities. The Board issued Regulation T, governing loans by security dealers and brokers, and Regulation U, governing loans by banks. Under Regulation T, effective May 1, 1936 margin requirements on new loans are 55 per cent of the loan. Under Regulation U, also effective May 1, 1936

new loans by banks for financing the purchase or carrying of registered securities require 55 per cent margins. Loans by banks to brokers operating under Regulation T require margins of only 40 per cent of the current market value. The margin requirements apply only at the time the loan is made and not throughout its life, but if margins on a customer's account fall below the required amount, owing to a decline in the market value of securities pledged, the margin must be restored again before the customer may make any new purchases.

TABLE XLVIII

MEMBER BANK LOANS ON SECURITIES TO BROKERS AND DEALERS IN SECURITIES
(In Thousands of Dollars)

<i>Date</i>	<i>In New York City</i>	<i>Outside New York City</i>
1928 Dec 31	\$2,556,000	\$850,000
1929 June 29	2,025,000	921,000
Dec 31	1,660,000	803,000
1930 June 30	2,365,000	819,000
Dec 31	1,498,000	675,000
1931 June 30	1,217,000	515,000
Dec 31	575,000	391,000
1932 June 30	274,000	283,000
Dec. 31	357,000	241,000

The Finance Company

Since 1900 there has developed a type of financial middleman known as the finance company. Its functions consist of: (1) buying the receivables of business houses (accounts, notes, and acceptances); (2) advancing funds to dealers to finance the carrying of inventory, (3) advancing funds to dealers to finance retail installment sales, and (4) advancing funds against merchandise.³

The discount company. The discount company is a finance company which specializes in making advances to business firms by the purchase of their receivables. It is es-

³ A study by the Division of Analysis and Research of the Federal Reserve Board on "Finance Companies," *Federal Reserve Bulletin*, January, 1923, pp 37-45. This study has been drawn upon extensively in the following discussion.

timated that about two thirds of all receivables purchased are accounts. Two methods are used: (1) Under the notification plan, the person or firm whose account is assigned is notified of the fact and instructed to pay the discount company. (2) Under the non-notification plan the debtor is not notified of the assignment, but the discount company must rely upon the honesty of the seller in forwarding funds received from the debtor. The non-notification plan is the one most commonly used, and the discount company protects itself by reserving the privilege of inspecting the seller's books and by making a contract whereby the seller agrees to transmit the original receipts (checks, drafts, and so forth) on the day received.

Discount companies normally advance from 75 to 80 per cent of the face value of the receivables, with the remainder to be paid when the total debt is collected. The seller has a contingent liability for the ultimate collection. The receivables sold have average maturities from 45 to 60 days, but from 10 to 20 per cent are not paid when due. The charges are usually $\frac{1}{2}\%$ of 1 per cent per day on the net face amount of receivables bought, plus \$5 per \$1,000 on the first \$100,000 of receivables discounted within any twelve successive months. Sometimes the charge is $1\frac{1}{2}\%$ per cent per month on the face of the receivables. Discount companies obtain funds to an amount of several times their own capital by borrowing from local banks or in the open market on collateral trust notes. The collateral consists of the receivables deposited with a trustee.

The automobile finance company. Companies financing automobile dealers carry on two types of financing, wholesale and retail. Wholesale financing consists of advancing funds for carrying unsold cars. Amounts advanced are 80 to 90 per cent (sometimes more) of the wholesale price and are made against dealers' notes or acceptances secured by warehouse receipts, chattel mortgages, trust receipts, conditional sale contracts, or bailment leases. The par-

ticular types of legal instruments used to protect the finance company vary with the laws of particular states.

Retail financing involves the purchase of customers' installment notes, generally indorsed by the dealer, although in perhaps about one fourth of the cases paper is indorsed by dealers without recourse. The bulk of the retail automobile finance paper of the large companies now bears the general indorsement of the dealer, thus giving the finance company recourse against the dealer in case the customer defaults. Customers' notes are most commonly secured by conditional sales contracts and chattel mortgages.

The National Association of Finance Companies recommends the use of conditional sales contracts in forty-two states and in the District of Columbia, and the chattel mortgage in the remaining six states. The chattel mortgage, as used in installment sales, is void in Pennsylvania and Connecticut, while the conditional sales contract is treated as an absolute sale in Louisiana.

The average ratio of borrowed capital to owned capital is about 2.5 to 1 for the small and middle-sized companies, while larger ones at times borrow as much as five times their own capital. The customary standard practice has been to borrow by the sale of collateral trust notes secured by the deposit of dealers' notes and customers' notes with a trustee. Since 1933, finance companies have, to an increasing extent, been borrowing in the open market on their unsecured notes.⁴ Smaller companies are often dependent upon their own banks for accommodation.

The most important single type of financing carried on by finance companies is that of the automobile trade. The experience of companies and dealers in the United States in 1935 on installment paper is shown in Table XLIX.

The volume of retail motor sales financed on the installment plan in 1935 was 1,333,600 new cars and 1,791,900

⁴ Information supplied by Milan V. Ayres, Secretary, National Association of Sales Finance Companies

TABLE XLIX

EXPERIENCE OF FINANCE COMPANIES AND DEALERS OF THE UNITED STATES,
1935*

	<i>Passenger Cars</i>	<i>Commercial Cars</i>
Average size of note purchased by finance companies.		
New cars	\$532	\$697
Used cars	238	333
"Skips" per 1,000 transactions—passenger and commercial combined †		2.4%
Percentage reposessions		
New cars	18%	10.4
Used cars	7.8	16.0
Average loss per repossessed car		
New cars	\$ 73	\$ 46
Used cars	93	40
Percentage ratio to total installment paper of paper over 12 mos.		
New cars	64.3%	51.0%
Used cars	25.1	20.1
Percentage of cars sold by dealers on installments		
New cars	58.2	55.9
Used cars	62.9	58.0

*Taken from estimates made by the National Association of Sales Finance Companies, Chicago

† "Skips" refer to cases where buyers disappear, taking the cars with them

used cars. The new-car financing amounted to \$734,100,000, and the used-car financing \$424,300,000. In addition, wholesale financing amounted to \$1,402,600,000.⁵

Economic reasons for finance companies. Finance companies advance funds to concerns and individuals who are unable to find accommodation at banks. The banks benefit by the credit of the finance company, which stands between the borrower and the bank. The reasons for the use of finance companies arise from the fact that: (1) the credit risk of the borrower does not meet the requirements of the bank; (2) the loans may have longer maturities than the banks desire; (3) installment sales must be carefully watched and involve occasional repossession and resale; and (4) the affairs of the borrower require careful

⁵ *Time-Sales Financing*, April, 1936, p. 7.

supervision if loss is to be avoided. The bank which buys finance company paper is free from the risk and the very considerable work of analyzing and watching the borrower's credit standing. Instead, this task has been forced upon the finance companies as the price for getting their paper sold to the banks.

Finance companies are expensive means of obtaining working capital, and obviously business firms which must resort to them are at a disadvantage as compared with those able to obtain loans directly from the banks. The cost is comparable to that of obtaining trade credit under the common 2 per cent discount for cash. Likewise, installment purchases by consumers are made expensive since heavy interest and service charges are added to the unpaid balance.

Dealers in Bankers' Acceptances

The acceptance market. Bankers' acceptances have already been described, and the importance of the Federal reserve banks in the establishment and maintenance of the market for acceptances has been considered. The market cannot operate, however, without specialists who act as intermediaries between sellers of acceptances and investors in them. These intermediaries are the acceptance dealers, who may be individuals, firms, or corporations.

The acceptance dealer.^a The dealer scrutinizes the bills offered and may by his indorsement add to their acceptability. He must have wide contacts with investors who buy bills, and he must have sufficient capital, whether owned or borrowed, to enable him to carry a large and diversified portfolio. He obtains his bills (or acceptances) from several sources. His most important single source is the accepting banks which have discounted their own acceptances for the owners instead of forcing them to seek

^a This discussion is based mainly upon a study on "Dealing in Acceptances," in the *Federal Reserve Bulletin*, October, 1921, pp. 1166-1170

an independent market. About one half of the bills bought by dealers in New York City are obtained directly from accepting banks, and the proportion is still greater for dealers in Boston and Chicago.⁷

Acceptance dealers usually buy the bills outright and rely for their main profit on selling at a lower rate of discount than that at which they buy. They operate extensively on borrowed funds. Most of them are also dealers in commercial paper, stocks and bonds, long and short-term government obligations, and "Federal funds." They are therefore established firms possessing capital stock devoted to other uses, and commonly invest little of their own funds in acceptances. From 85 to 100 per cent of their portfolio may be carried on funds obtained in the call loan market. Their market consists mainly of banks in the larger cities, with which they keep in contact by salesmen, telegraph and telephone, and circularization.

Since the dealers borrow the bulk of their funds, the cost of funds in relation to the yield on the portfolio of acceptances has a special bearing on the profit to be realized. Call money rates are usually very close to the acceptance rate, so that the dealer expects to make little, if any, profit out of the difference. At times the call rates rise above the acceptance rate, with the result that the dealer is compelled to liquidate quickly to avoid loss. Under such circumstances the reserve banks come to the rescue with their fifteen day repurchase agreements. At times a fairly large percentage of dealers' portfolios is carried under resale agreements; this has been particularly true in New York City. The reserve banks charge rates of discount equal to their ordinary buying rates on similar bills. The rates are fixed with an eye to assisting the dealer to avoid loss. If dealers are not in need, the rate will be fixed at a level above the open market rate on bills. If dealers need help, the reserve banks lower their buying rates somewhat below

⁷ "Operation of National and Federal Reserve Banking Systems," *Hearings, op. cit.*, pp. 926-935.

the rate at which dealers sell, so that dealers will not lose.

Dealers "recognized" by the Federal reserve banks are those whose indorsement is sufficient to satisfy the reserve banks when buying for their own account or for foreign correspondents or is adequate to protect the bank in entering into resale agreements. Ten recognized dealers were listed in answers of the reserve banks to questionnaires sent to them during the Senate hearings on the subject: "Whether a dealer's indorsement is recognized or not depends on the possession of a substantial net worth in relation to the business transacted, the experience and ability of the management, his clientele; character of transactions; rapidity of distribution; his willingness to bid for bills and to circulate at frequent intervals a list of offerings."⁸

Since bills sold to the reserve banks must be satisfactorily indorsed, dealers offering bills obtained directly from the accepting banks must indorse them. If a bill has previously been held by a bank for investment and has been indorsed and sold to the dealer, the dealer's indorsement is not necessary. Indorsed bills sell at $\frac{1}{8}$ of 1 per cent under the rate for unindorsed bills. At the end of 1930 the Discount Corporation of New York, one of the largest dealers in acceptances, having a capital of \$9,800,000, was contingently liable on indorsements for \$129,000,000.⁹

The Commercial Paper Market¹⁰

Commercial paper. Open market commercial paper is a valuable aid to liquidity and diversification for the banks of America. It is especially important for the smaller unit banks whose local loans must be made to a narrow range

⁸ *Hearings, op cit*, p 848

⁹ Beckhart, *op cit*, p 381

¹⁰ The material in this section was very largely taken from a study by Steiner, W H., of the Division of Analysis and Research of the Federal Reserve Board, published in the *Bulletin* in August and September, 1921, pp 920-926, 1052-1057. A good account of the commercial paper market appears in Beckhart, Benjamin H., *The New York Money Market*, Vol III.

of industries. It is also useful to banks which have seasonal excess funds for investment. It facilitates industrial and geographical diversification, and because of its variety of denominations and maturities, it helps the individual bank to arrange a suitable portfolio of liquid assets. The paper of good firms has an enviable reputation for prompt payment at maturity and is normally eligible for rediscount when within three months of maturity.

Denominations vary from \$2,500 to \$50,000, with \$5,000 as the most common denomination. The size offered is determined by the requirements of banks which are in the market to buy at any particular time, since commercial paper so bought is subject to the 10 per cent limit. The bulk is unsecured single-name paper, although some paper is indorsed and a small amount is secured by collateral¹¹ The maker is normally the payee who has indorsed the paper in blank. The paper thus becomes payable to bearer and requires no further indorsement to pass title. Maturities are in most cases in six months, although other maturities are not uncommon. Maturities tend to be longer in times of easy money. Shorter maturities in times of tight money make paper more attractive to banks because of the shorter interval necessary before the paper becomes eligible for rediscount.

Commercial paper houses. Beckhart estimates the number of commercial paper houses in the United States at thirty-five or forty, with the bulk of the business done by about twenty. Most houses are partnerships with relatively small capital and have their principal offices in New York, Chicago, and Boston. Some houses cover the market by establishing branches; some rely on correspondents; all depend upon salesmen to make contact with buyers, and to a varying extent, on circularization.¹²

¹¹ Eighty per cent is estimated to be paper of commercial and industrial firms of which five eighths is unindorsed. Twenty per cent is collateral trust paper of finance companies and other financial middlemen. See Foulke, Roy A., *The Commercial Paper Market*, 1936, pp 7-10.

¹² Beckhart, *op cit.*, p 216.

Dealers in commercial paper watch the seasonal shifts in available funds. The South normally buys paper between November and March, when cotton is sold. The Northwest buys after grain has been marketed. The Middle West, with diversified agriculture, tends to be a year-round buyer.¹³ Dealers sell on an option to return, the period most commonly being ten days. They sell without indorsement and thus do not guarantee payment, although under the negotiable instruments law they warrant the genuineness of the paper and the capacity of the maker.

Commercial paper houses generally buy paper outright at a determined price, less a commission. A decline in discount rates before resale gives the dealer an extra profit and, vice versa, a loss if rates rise. In case the dealer does not wish to carry this risk, he may buy on an "open rate" basis, advancing the bulk of the face of the paper, with final adjustment of the amount made in the light of the price at which the paper is actually sold. Only a small volume of paper is taken on consignment. Dealers' commissions are generally $\frac{1}{4}$ of 1 per cent of the face of the paper, regardless of the maturity.¹⁴

Regulation of open market borrowers. For the sake of its reputation, a commercial paper house must avoid handling paper of firms which may default. It therefore investigates the borrower with the same sort of care as is used by banks with unsecured borrowers. Audited balance sheets and income statements are examined, and the borrower's prospects are evaluated.¹⁵ Further, open market borrowers are expected to maintain with banks unused lines of credit sufficient to take up the open market paper. This is especially important in the case of continuous borrowers who may be caught in a tightening money market when open market paper becomes particularly hard to sell. Dealers estimate that from 50 to 75 per cent of open

¹³ *Federal Reserve Bulletin*, August, 1921, p. 922.

¹⁴ *Ibid.*, September, 1921, p. 1055.

¹⁵ Beckhart, *op cit.*, p. 925.

market paper is replaced at maturity by offerings of new paper. Open market borrowers who maintain open bank lines are subject to scrutiny by the bank (an obvious advantage). There is always some danger that borrowers may borrow excessively by virtue of their access to both banks and the open market. Borrowing firms must be of such size that their needs will command the interest of the dealers. The minimum net worth of such borrowers is perhaps about \$200,000, with variations depending upon the particular circumstances.

Financing the commercial paper house. Commercial paper houses which have relatively little capital rely upon borrowing at banks to carry their inventory of paper awaiting sale. The commercial paper is used as collateral for the loans. Borrowing will vary with the volume of commercial paper handled and the speed with which it is sold.

CHAPTER XXVI

AGRICULTURAL CREDIT

Since the beginning of the twentieth century the credit problems of the American farmer have become more pressing, partially as a result of rising land values following the disappearance of free land, and partially because of the increased intensity of cultivation, which required larger amounts of working capital. It is ordinarily said that the farmer requires three separate types of credit: (1) long-term mortgage credit to purchase land; (2) intermediate term credit (running from six or nine months up to three years) to finance the purchase of fertilizer, stock for feeding and breeding purposes, equipment, and improvements; and (3) short-term credit of not over nine months to purchase seed and feed, and to finance the storage of crops awaiting market.

The farmer's credit needs are increased by the fact that it is generally impossible for him to incorporate and get capital by the issue of securities. He must, therefore, depend upon what capital he owns and can muster by borrowing to provide the relatively large amount of funds required in agriculture. Being a small-scale borrower engaged in a highly risky enterprise, he must, for the most part, borrow locally where capital is normally scarce and dear. Rates as high as 10 to 15 per cent have been common in some districts.¹ Long-term mortgage credit has been obtained. (1) from local money lenders; (2) from

¹ Baird, Frieda, and Benner, Claude, *Federal Intermediate Credits*, 1933, p. 22.

mortgage loan companies; and (3) from banks and insurance companies. Before 1914 national banks were not permitted to lend on real estate mortgages, but the Federal Reserve Act permitted those outside of central reserve cities to make five year loans on farm land. State banks, on the other hand, have generally been allowed to lend on real estate, and farmers have obtained credit from that source. For shorter term credit the farmer, in the past, has relied upon: (1) merchants or dealers who in turn obtained credit directly or indirectly from city banks; and (2) local banks. In either case the cost was frequently high.²

Long-term Credit Institutions

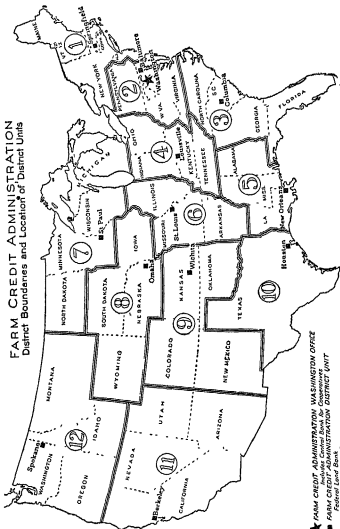
The Federal land banks.³ The first important attempt made to improve the farmer's credit facilities was made in 1916 when Congress authorized the organization of twelve Federal land banks to have a minimum capital of \$750,000 each. The capital was originally subscribed by the Federal Treasury, but national farm loan associations become stockholders by virtue of the fact that they must subscribe to stock in amounts equal to 5 per cent of the loans made at the land banks. When the loan associations buy enough stock, the government holdings are retired.

National farm loan associations. If not less than ten persons wish to borrow from a Federal land bank, they may organize a national farm loan association. Each association elects a board of directors of at least five members, who choose a secretary-treasurer and a loan committee of three. Its application to the Farm Credit Administration

² *Ibid*, p. 19

³ At the time when the Federal land banks were organized, provision was made in the law for the organization of privately owned joint stock land banks with powers and privileges similar to those of the Federal land banks. The unfortunate experiences of some of the joint stock land banks tended to discredit the system. The Emergency Farm Mortgage Act of 1933 provided for a termination of their functions and for their liquidation.

FARM CREDIT ADMINISTRATION
District Boundaries and Location of District Units



- ★ FARM CREDIT ADMINISTRATION WASHINGTON OFFICE
 - FARM CREDIT ADMINISTRATION DISTRICT UNIT
 - Intermediate Credit Bank
 - Federal Land Bank
 - Production Credit Corporation
- LOCATION OF NATIONAL FARM LOAN ASSOCIATIONS AND AGRICULTURAL CREDIT ASSOCIATIONS NOT SHOWN

for a charter includes an affidavit stating that each of the organizers is the owner, or about to become the owner, of farm land qualified as a basis of a land bank loan. It must be accompanied by a subscription to stock in the land bank equal to 5 per cent of the desired loans. Once the association is set up, a new borrower applies for membership and subscribes to stock in the association to an amount equal to 5 per cent of his prospective loan. He may become a member upon a two-thirds vote of the directors. The borrower's application is referred to the loan committee, which appraises the land and makes its report. If it is unanimously approved by the loan committee and by the directors, a report to that effect is sent with the application to the land bank, which may grant the loan on further investigation.

Security for loans made at land banks. The local loan association indorses the member's note before it is sent to the land bank. This indorsement acquires value from the fact that the association owns stock in the land bank equal to 5 per cent of the total loans. This stock is purchased out of the proceeds of the sale of a like amount of its own stock to its members. Moreover, members of the association are doubly liable on their stock ownership for all debts of the association incurred before 1933. Since this equity provides the basis for the liability of the member borrowers, it furnishes an essential element of coöperative credit and should make for interest on their part in the soundness of loans extended.

In addition to the association indorsement, the loan must be secured by a recorded first mortgage on land within the district and must not be over 50 per cent of the appraised value of the land itself, plus 20 per cent of the value of permanent insured improvements. The loan must provide for amortization of principal and payment of interest so as to extinguish the debt in from five to forty years. In addition, the whole or any part of the debt may be paid after five years. The rate of interest cannot be more than 1 per

cent above the rate on the last issue of land bank bonds. Only persons actually engaged, or about to become engaged, in the cultivation of the mortgaged land can borrow. The purposes of such loans may be (1) to buy agricultural land, equipment, fertilizer, and livestock; (2) to make improvements on farm land; (3) to liquidate the indebtedness of the owner incurred for agricultural purposes; and (4) for general agricultural purposes.

Emergency status of national farm loan associations. The heavy demands for refinancing loans at the land banks since 1933 has resulted in a short circuiting of the local associations in two ways. (1) Beginning August, 1933, applications for loans were received directly by the land banks without previous approval by the local associations. This situation arose from the fact that many applications for loans were of the sort not eligible to be handled through the regular land bank channels. Those finally approved, however, required the ultimate approval and indorsement of the association if the loans were to be made through it. (2) In cases when a borrower does not have access to borrowing through an association, the land bank may make a direct loan carrying a rate of interest $\frac{1}{2}$ of 1 per cent higher than that paid by borrowers through associations. The borrower must subscribe to stock in the land bank to an amount equal to 5 per cent of his loan. If a direct-loan borrower joins an association later, he benefits by a corresponding reduction in interest.

Attempts are now being made to return the local associations to their previous position in respect to land bank loans. This is necessary if the coöperative character of these loans is to be maintained. The local associations are required to set aside, semiannually, 10 per cent of their net earnings until the reserve account equals 25 per cent of the capital stock, and 5 per cent thereafter.

Source of land bank funds. The federal land banks obtain part of their capital from government subscription and the remainder from the local loan associations and direct

borrowers. On December 31, 1935, their combined capital was \$235,991,264, 52 per cent of which was owned by the government. The bulk of the land bank funds are obtained by the sale of bonds which are exempt from Federal, state, and local taxation and directly or indirectly are the obligation of all twelve Federal land banks. Collateral security consists of farm mortgages held in trust. Each land bank is required to set aside 50 per cent of its semiannual net earnings until its reserve account equals its capital stock.

Emergency financing by land banks. On January 23, 1932, the law was amended to permit the Secretary of the Treasury to subscribe to \$125,000,000 additional stock in the land banks to strengthen their capital structure. Relief to borrowers already in debt to the land banks was extended in 1933 by further amendments to the law which: (1) permitted needy borrowers to postpone (within five years) any installments with interest on the unpaid amounts accruing at simple interest at the regular rate; and (2) reduced the maximum interest rate to $4\frac{1}{2}$ per cent for five years.⁴ To offset any loss in the land bank revenue, the Secretary of the Treasury was required to subscribe to the surplus accounts of the land banks. The maximum amount of any individual's loan was raised from \$25,000 to \$50,000 with the approval of the Land Bank Commissioner.

To give relief to farmers in debt to other institutions or individuals, the land banks were authorized to purchase first mortgages on farms either for cash or by exchanging farm loan bonds for them, paying no more than 50 per cent of the "normal value" of the land and 20 per cent of the value of the permanent improvements. The mortgages were refinanced under the favorable existing land bank loan terms on the basis of the amount paid by the land bank. The borrower whose mortgage was bought obtained relief in lower interest and the opportunity for postponement of

⁴ Later reduced to $3\frac{1}{2}$ per cent, which rate, under the present law, will be in force until the middle of 1938.

payment for five years; in addition, he often stood to gain in the scaling down of the debt required if the face amount was over 50 per cent of the normal value of the land and 20 per cent of the value of the improvements. Two difficulties arose in the execution of this program. First, creditors could not be compelled to sell their mortgages, and hence relief to debtors in good standing with the creditors was impossible to arrange unless the creditor was hard pressed for liquidity. Otherwise, creditors preferred a good mortgage to cash or the low-interest-bearing bonds offered in exchange. Second, if the land bank were to offer an attractive enough price to interest the creditors holding a mortgage in default, the *normal value* had to be stretched considerably above the existing land values of 1933 to 1934.

Emergency financing by the Land Bank Commissioner. Since many farmers' debts were in excess of the amount which could be financed through regular land bank loans, the Land Bank Commissioner was authorized to lend on first and second mortgages on both real and personal property to an amount (including any prior indebtedness) equal to 75 per cent of its normal value. Such loans might not exceed \$5,000 and must be amortized over not more than ten years if secured by personal property. These loans were for: (1) refinancing past debts; (2) providing working capital; and (3) providing funds for the farmer to exercise his equity of redemption or to repurchase land lost by foreclosure.

The Federal Farm Mortgage Corporation. The Federal Farm Mortgage Corporation is a government-owned corporation, organized in 1934 and permitted to issue up to \$2,000,000,000 in bonds fully guaranteed by the government. The bonds have been (1) sold to obtain funds for Land Bank Commissioner loans; (2) sold to furnish the land banks with cash at times when their own unguaranteed bonds would not command a good market; and (3) exchanged for the less marketable land bank bonds and used

by the land banks in the purchase of mortgages by direct exchange

Other emergency agricultural loans. As early as June, 1929, an Agricultural Marketing Act was passed, setting up the Federal Farm Board, equipped with a \$500,000,000 revolving loan fund out of which loans might be made to coöperative marketing associations and stabilizing corporations. These loans were made to finance the storage and marketing of agricultural commodities and to control crop surpluses. The Board was also authorized to "insure" coöperative associations against any decline in the prices of products held.

On May 19, 1932, the Reconstruction Finance Corporation was authorized to create in any land bank district a regional agricultural credit corporation with a capital of at least \$3,000,000 and authority to make agricultural loans and to rediscount the notes obtained, when eligible, at the Federal reserve banks or the intermediate credit banks. In 1933 the government organized the Commodity Credit Corporation to make loans to agricultural producers against commodities in storage. In addition, Congress has regularly authorized either the Secretary of Agriculture or the Farm Credit Administration to extend small loans to farmers in drought and storm-stricken areas.

Intermediate Credit

To improve the acceptability of farmers' notes (in excess of nine months' maturity) given to obtain working capital, the government, under an act of March 4, 1923, established twelve intermediate credit banks. These banks are located at the same places and have the same management as the Federal land banks. The stock of each is at least \$5,000,000 and is owned by the government. One half of the net earnings are to be carried to surplus until it equals the subscribed capital, and thereafter 10 per cent is carried to surplus. The remainder of the net earnings go to the government. These banks may issue tax-free debentures, se-

cured by discounted paper, to an amount not over ten times the paid-up capital and surplus. All intermediate credit banks are indirectly liable for these debentures. These banks may rediscount or purchase agricultural paper of not more than three years' maturity held by banks, agricultural credit corporations, livestock loan companies, or coöperative credit and marketing associations, and may make loans secured by such paper. They may also make direct loans to agricultural coöperative associations up to 75 per cent of the value of warehouse receipts, shipping documents, and mortgages on livestock offered as collateral.

The interest rate charged by the Federal intermediate credit banks may not exceed the rate on their debentures by over 1 per cent. Paper is not eligible to be offered to the intermediate credit banks for discount or collateral if the maker is charged a rate more than 3 per cent in excess of the discount rate of the intermediate credit bank unless a wider spread is approved by the Governor of the Farm Credit Administration.

Improved Short-term Credit Facilities

Production credit corporations. The farmer, particularly in the West, has always borrowed at a disadvantage. The collapse of commercial banks in the agricultural areas increased these difficulties and in many instances shut off completely his contact with sources of credit. The government stepped in with emergency loans, made both directly and indirectly through the RFC's regional agricultural credit corporations. But permanent improved short-term credit facilities for agriculture were required, and in answer to this need, production credit corporations and production credit associations were provided in 1933. There are twelve production credit corporations, each located at the same place as the land bank and intermediate credit bank of its district, with a combined capital of \$120,000,000, which belongs to the government. The production credit corporations purchase Class A Stock in

the production credit associations in an amount equal to approximately 20 per cent of the loans which the association is expected to make. Class A Stock is nonvoting but is preferred as to assets.

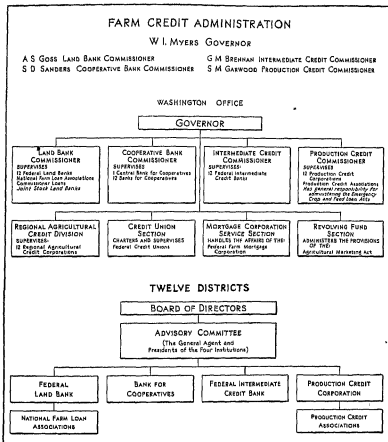
The production credit associations are local lending units, operating cooperatively. Their members purchase Class B Voting Stock (one member has one vote) to an amount equal to 5 per cent of their loans. The associations make short-term (up to one year) loans to farmers. Their capital funds are invested in approved securities, which are in turn pledged as marginal collateral with the intermediate credit bank when the association offers borrowers' indorsed paper for discount or as collateral for loans. Borrowers may not be charged a rate more than 3 per cent in excess of the discount rate of the intermediate credit bank unless specifically permitted by the Governor of the Farm Credit Administration. The loans of these associations are being substituted for the loans of the regional agricultural credit corporations now in liquidation.

The banks for coöperatives. To care for the needs of agricultural coöperatives, a Central Bank for Coöperatives and twelve district banks for coöperatives have been set up. The Central Bank lends to national or regional farmers' coöperatives, while local coöperatives are cared for by the district banks. The capital stock of these banks was obtained from the revolving fund established under the Agricultural Marketing Act of 1929. Borrowers subscribe to stock to 5 per cent of the amount of their loans. The lending powers of these banks are now extended to include loans to coöperatives furnishing farm services (such as mutual insurance companies); for purchasing, testing, grading, distributing, or furnishing farm supplies; and for marketing farm products.

Management of the farm credit system.⁵ The farm

⁵ For a good account of the present farm credit system, see the study sponsored and published by the American Institute of Banking, *Farm Credit Administration*, 1934.

credit system is under the control of the Farm Credit Administration created May 27, 1933. This Administration is the successor to several other organizations and was set up to give uniform centralized control. It has control over



the land banks, the Land Bank Commissioner loans, the intermediate credit banks, the production credit system and the banks for cooperatives, the Federal Farm Mortgage Corporation, and emergency crop and seed loans.

Economic importance of Federal-sponsored credit system. The magnitude of the loans of the farm credit

system may be seen from Table L. The system as it now stands is heavily subsidized by the Federal Government. In addition to its investment in purely emergency lending agencies, the government, at the end of 1935, had an investment of almost \$500,000,000 in agencies intended to be permanent in nature. Some of this investment will be withdrawn as borrowers increase their ownership and the agency takes on more of the characteristics of true co-operative credit institutions. A heavy initial investment




TABLE L
NUMBER AND AMOUNT OF FARM CREDIT ADMINISTRATION LOANS
OUTSTANDING MAY 31, 1937 *

<i>Institution</i>	<i>Number</i>	<i>Amount</i>
Farm mortgage loans		
Federal land bank loans	638,128	\$2,053,558,404
Land Bank Commissioner	456,121	831,704,985
Total	1,094,249	2,885,263,389
Short-term credit		
Production credit associations	215,093	152,465,934
Emergency crop loans	1,259,861	130,473,896
Drought relief loans	239,618	59,212,353
Regional agricultural credit corporations	21,832	23,452,944
Federal intermediate credit banks to private financing institutions		45,131,258
Total		410,736,385
Loans to cooperatives		
Federal intermediate credit banks		1,070,095
Banks for cooperatives	1,458	45,000,346
Agricultural Marketing Act revolving fund	224	47,732,226
Total		93,802,667
Grand Total		\$3,389,802,441

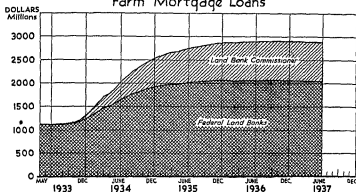
* Farm Credit Administration, *Monthly Report on Loans and Discounts*, May, 1937

by the government to furnish a stockholders' equity as a basis for borrowing was necessary if a coöperative credit agency of sufficient size to be effective was to be established. It is important that the government interests be maintained at the lowest level compatible with the best functioning of the farm credit system if it is to become self-supporting and powerful enough to be anything more than a channel for mere governmental aid.

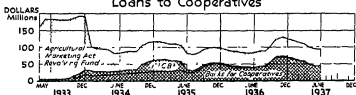
FARM CREDIT ADMINISTRATION LOANS OUTSTANDING (at End of Each Month)

 Permanent Institutions
  Emergency Institutions
  Institutions in Liquidation

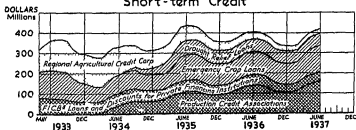
Farm Mortgage Loans



Loans to Cooperatives



Short-term Credit



The advantages to the farmer of coöperative credit include: (1) access to the best money markets through the increased scale of borrowing; and (2) lower rates due to the diversification of risk and protection arising from the coöperative liability feature. Government control helps to insure necessary management of proper quality.

The development of the farm credit system may have profound effects upon the problems of the rural banker. It is not necessary that it monopolize the extension of farm credit, but merely that it should supplement existing sources of credit in order to be of real service to the farmer. Bankers, however, feel that it presents a form of competition which is difficult to meet. The fact that the government furnishes a substantial part of the owners' capital yet does not require any return is one source of unfair advantage. Another cause for complaint is found in the fact that obligations of the farm credit agencies offered in the market for investment are exempt from Federal, state, and local taxation. In the face of this competition, private lenders must in many instances be content with a smaller rate of return than heretofore. The country banker must choose between purchasing the obligations of the credit agencies (such as land bank bonds and intermediate credit debentures) and aggressively meeting the competition locally on its own grounds. There is evidence that he can meet this competition successfully in some cases at least. Production credit loans, for example, cost the farmer more than the rate of interest charged on the loan. An inspection fee must be paid by the applicant for loans. This amounts to at least \$3 and is a little less than 1 per cent of the face of loans under \$1,000. Added to this is the application fee of \$.50, an abstract fee of about \$.50, and a mortgage filing fee of \$.60. Further, the borrower must tie up 5 per cent of his loan in stock in the association. If a borrower requires \$500, the incidental costs, including the interest on \$25 invested in the stock of the association at 5 per cent would be about \$7.85. The

rate of interest charged (1936) is 5 per cent. The total cost of borrowing \$500 for one year would be about \$32.85, bringing the cost of the loan up to 6.48 per cent per year. In addition, the borrower must wait about two weeks from the time he makes application before the funds are forthcoming. Under these circumstances local banks should not have any great trouble in obtaining the cream of the short-term farm loan business if they wish it

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